

THE
NUMISMATIC CHRONICLE
AND
JOURNAL OF
THE ROYAL NUMISMATIC SOCIETY

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OF THE
ROYAL NUMISMATIC SOCIETY

EDITED BY
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THE COINS OF HIERAPOLIS IN PHRYGIA.

(See Plates I.-IV.)

THE coins described in the following pages do not form a *corpus*; but no type of any importance accessible to me has, as far as I know, been omitted. Coins with magistrates' names have, with the exception of a few examples of particular importance, been omitted from this catalogue, as have all the alliance coins. The latter have been separately discussed in the *Journ. Intern. d'Archéol. Numism.*, 1912, pp. 65 ff. The principal Apollo types which, with the coins with magistrates' names, have already been collected in *Χάριτες*, pp. 466 ff., are also omitted; finally, I have not (with a few exceptions) included the coins with an agonistic type on the reverse—the so-called games-coins—as these have been discussed by von Papen in the *Zeitschrift für Numismatik*, xxvi. 168 ff. (A few additional coins are given in the *Journ. Intern.*, *loc. cit.*) For further information on Hierapolis, its history, its cults, inscriptions, &c., the reader may be referred to the standard work on the subject, *Altertümer von Hierapolis*, edited by C. Humann, Contr. Cichorius, W. Judeich, Fr. Winter (*Jahrb. d. Archäol. Inst.*; *Ergänzungsheft*, iv.), and to the article in *Philologus*, lxi. 178 ff. (*Apollon Pythoktonos im Phryg. Hierapolis*).

The main purpose of this article is to give a complete survey of the cults existing in Hierapolis and to record the coin-types connected with them. The deities and other persons represented on the coins are therefore arranged in alphabetical order. It is as a rule the reverse types on which this arrangement is based; since, however, similar types are also found on the obverses, particularly on the older coins of the city, a list of the types is given at the end for convenience of reference. Within the groups thus formed the individual types and their varieties are as far as possible clearly distinguished and chronologically arranged. In this arrangement I have adhered throughout to that of the *British Museum Catalogue: Phrygia*, pp. 228 ff. It will be noticed that this collection lacks a large number of types here published for the first time. This arrangement yields the same result as that of the alliance-coins, namely, that the coinage of Hierapolis was extraordinarily rich and varied; the unusually large number of types clearly shows how prosperous the town must have been and how extensive its trade, particularly in the second and third centuries after Christ.

The following points should also be noted:—

The reverses of all the coins in one group are from the same die unless the contrary is stated.

Special attention has also been called to identity of die in the obverses of all coins, where it has been possible or seemed desirable.

A legend in brackets means that although the reading is certain, its exact division is not known.

Unless otherwise mentioned the figure on the obverse is to the right.

The following abbreviations are used:—

$\left. \begin{array}{l} Gr. M. = \\ M. Gr. = \\ Kl. M. = \end{array} \right\} \text{Imhoof-Blumer} \left\{ \begin{array}{l} \text{Griechische Münzen.} \\ \text{Monnaies Grecques.} \\ \text{Kleinasiatische Münzen.} \end{array} \right.$

Inv. Waddl. = *Inventaire Sommaire de la Collection Waddington*, par M. E. Babelon.

Hunter = G. Macdonald, *Catalogue of the Greek Coins in the Hunterian Collection*.

Mionnet = M., *Description de Monnaies*.

I have to thank the authorities of the coin-cabinets in Athens, Berlin, Copenhagen, Dresden, Gotha, The Hague, London, Munich, Paris, St. Petersburg, and Vienna, and Dr. Imhoof-Blumer for the help so readily accorded me, without which it would have been impossible to undertake the following attempt to present for the first time with some degree of completeness the material available for the study of the coinage of Hierapolis.

I. AKTIA.

1. *Obv.*—(ΔΗΜΟC).

Rev.—ΙΕΡΑΠΟΛΕΙΤ Ι., Ω Ν ΝΕΩΚΟ Ρ, in field Ω Ν r., AKTIA l. Athlete naked to front, head r., with r. hand placing agonistic crown on his head and holding palm in l. Border of dots.

B. M., No. 72; Copenhagen, 18 [Pl. I. 1]. On the *Ἀκτια* in Hierapolis, cf. von Papen, *Die Spiele von H.* (*Z. f. N.*, xxvi. 168 ff.). Representations of agonistic crowns are found not only on agonistic coins proper but, even more frequently, on alliance coins.

2. *Obv.*—ΣΕΥCΤΡΩ r., ΙΟC l. Head of Zeus Troios, bound with taenia. Border of dots. Countermark, Zeus Laodikeios (?).

Rev.—ΙΕΡΑΠΟΛΕΙΤΩΝΝΕΩΚΟΡ ΩΝ; $\begin{matrix} A \\ KT \\ A \end{matrix}$ in laurel wreath. Border of dots.

Berlin, 81 [Pl. I. 2] = *Kl. M.*, 13. The obverse die is the same as that of the obverse of XIV. 6.

II. APOLLO.

The principal Apollo types, that are of special local interest for Hierapolis, have already been collected in *Χάριτες*, *Fr. Leo dargebracht*, pp. 480 ff.

Another coin, in the Munich cabinet, which was unknown to me when I wrote that article, may be added here.

Obv.—Head of Apollo, laureate, hair bound in bunch behind, with loose ringlets hanging down neck.

Rev.—ΙΕΡΟ ρ., ΠΟΛΙΤΩΝ Ι. Tripod, Μ above on ρ.

This piece closely resembles the two described on p. 481, *c*, but is not from the same die and is of decidedly later style than they. The symbol is the same as on p. 480, 1*a*, which likewise bears archaic types. Only types with purely conventional portraits of the god are collected here, for the striking wealth in types clearly shows that Apollo as the city-god was held in particular reverence in Hierapolis.

1. *Obv.*—Head of Zeus, laureate.

Rev.—ΙΕΡΟ ρ., ΠΟΛΙΤΩΝ Ι., in straight lines. Α(pollo) Κ(itharoides), in long chiton and mantle, standing ρ., holding lyre in Ι. arm and plektron in ρ.
B. M., 8 (Pl. xxix. 3); Berlin, 7.

2. *Obv.*—Similar.

Rev.—ΙΕΡΟΠΟ ρ., ΑΙΤΩΝ Ι., in straight lines. Α. Κ., monograms in front of and behind the god; similar to B. M., 4, 5 (?).

Inv. Wadd., 6085 (Pl. xvi. 15) [Pl. I. 3].
Variant of B. M., 8.

The obverses of 1 and 2 are similar but not from the same die. Both types belong to the earliest issues of

the town; type 2 is perhaps a little later in style than 1 and intermediate between the latter and the coins of the following types.

3. *Obv.*—Similar.

Rev.—ΙΕΡΟΠ[Ο] r., ΑΙΤΩΝ l., in straight lines. A. K.; behind .

Copenhagen, 3; variant of B. M., 8; the monogram of magistrate's name as in B. M., 1.

4. *Obv.*—Similar.

Rev.—ΙΕΡΟΠΟΛΕΙ (!) [ΤΩΝ] l., ΔΟΡΥΚΑΝ[ΟΣ] r., in straight lines. A. K.

Inv. Wadd., 6086; Berlin, 5 [Pl. I. 4]; Berlin, 6 (they are = *Gr. M.*, 738, 690; Pl. xii. 19).

The obverses of types 3 and 4 are from the same dies; their style is decidedly later than that of the obverses of the preceding coins. The reverse of *Inv. Wadd.*, 6086, and Berlin, 5, are from the same die; the reverse of Berlin, 6, is similar to them, but not from the same die. The lyre frequently appears alone on the coins of this city, particularly on those of Augustus: B. M., 97, 107–109; Berlin, 5 specimens (cf. *Kl. M.*, 25; *Gr. M.*, 739, 694a); Paris, 583 (= Mionnet, iv. 608); *Inv. Wadd.*, 6141; Gotha. Cf. also Mionnet, *Suppl.*, vii. 384.

Among the coins with the lyre on the reverse, one, in Dr. Imhoof-Blumer's present collection, merits special mention.

Obv.—ΤΙΒΕΡΙΟΣ r., ΚΑΙΣΑΡ l. Head of Tiberius.

Rev.—ΙΕΡΑΠΟΛΕΙΤΩΝ ΜΕΝΑΝΔΡΟΣ; lyre; in field, $\pi\epsilon$.

This coin adds a new name to the list of magistrates in the reign of Tiberius, given in *Χάριτες*, p. 488. The

name is of frequent occurrence in the inscriptions of the town.

5. *Obv.*—ΛΑΙΡΒΗΝΟ r., C below. Bust of Lairbenos,¹ radiate, with shoulders draped. Border of dots.

Rev.—ΙΕΡΑΠΟ r., ΛΕΙΤΩΝ l. A. K. Border of dots.

B. M., 54; *Inv. Wadd.*, 6107 (Pl. xvi. 20)
[Pl. I. 5]; Berlin, 66.

¹ As the *British Museum Catalogue* and Imhoof's *Kleinasiatische Münzen* show, Hierapolis is the only Phrygian city at which this Lairbenos appears; but here he is represented on a considerable number of coins. These have already been collected in the *Journ. Intern.*, xiv. (1912), p. 77. As in making a more thorough study of all the coins of this city I have found several more types, I append them here for completeness. Six different types may be distinguished.

1. ΛΑΙΡΒΗΝΟ r., C l. (II. 5). B. M., 54; *Inv. Wadd.*, 6107; Berlin, 66 (cf. Pl. I. 5).
2. ΛΑΙΡΒΗΝΟC r. (IX. 1). Berlin, 65; Vienna, 19868 (cf. Pl. II. 22).
3. ΛΑΙΡΒΗΝ r., OC l. (IX. 2). Gotha.
4. ΛΑΙΡ l., ΒΗΝΟC r. (XVI. 1-4). B. M., 57 (Pl. xxx. 6), 58; Paris, 570, 571; Berlin, 67; Imhoof, present collection = *Kl. M.*, 8; Vienna, 19867, 27707 (cf. Pl. III. 38).
5. ΛΑΙΡ l., ΒΗΝΟC r. (II. 6, 7; XXVIII. 7; XXX. 1-2). B. M., 60-61; Berlin, 69, 71, 72, 78 (Pythia), 79, 80 (Aktia); Paris, 572; Munich, 3 (Aktia), 4 (Pythia); *Inv. Wadd.*, 6108, 6109, 6111 (Aktia); Vienna, 30614, 31396; Athens, 5905^b (cf. Pl. IV. 62, 66).
6. ΛΑΙΡ l., ΒΗΝΟC r. (XVI. 5-7; XXI. 9; XXX. 3). All the alliance-coins with the type of L.; also B. M., 59, 62-64; Berlin, 68, 73 (cf. *Xápıres*, p. 484, 8), 75-77; Paris, 569, 571a; *Inv. Wadd.*, 6110 (Pythia); Vienna, 19869, 30824, 30849; Athens, 19 (Pythia); Copenhagen, 62 (?); Munich, 5; Gotha (cf. B. M., Pl. lii. 3; *Journ. Intern. d'Archéol. Num.*, xiv. 1912, Pl. i'. 20).

The head of L. also appears above on the coins of H. as a counter-mark, e.g. Munich, 12 (Claudius), 12a (Nero); there are presumably other specimens in existence.

Of these six varieties, 1-3 are of markedly better style, and may be ascribed to the period before Caracalla (cf. B. M., 56); 4 is later than the specimens of 3; 6 may with certainty be placed to the period of Philip, and 5 to the period before Philip. It differs distinctly from the latest type, and points to greater skill on the part of the die-cutters. The remarkable outburst of deities peculiar to Asia Minor on the coins of Hierapolis at so late a period (besides Lairbenos there is the so-called

6. *Obv.*—ΛΑΙΡ l., ΒΗΝΟC r. Bust of Lairbenos, radiate, with shoulders draped. Border of dots.

Rev.—ΙΕΡΑΠΟΛΕΙΤ l., ΩΝΝΕΩΚΟΡΩΝ r. A. K. Border of dots.

B. M., 60; Berlin, 71, 72; Vienna, 30614.

7. *Obv.*—Similar.

Rev.—ΙΕΡΑΠΟΛΕΙΤ l., ΩΝΝΕΩΚΟΡ r.; ΩΝ in field r. A. K. Border of dots.

Paris, 572 (= Mionnet, iv. 590); variant of B. M., 61. The obverses of Nos. 6 and 7 are from the same die and belong to the period before Philip.

8. *Obv.*—(ΔΗΜΟC).

Rev.—ΙΕΡΑΠΟ r., ΛΕΙΤΩΝ l. A. K. Border of dots.
Copenhagen, 17.

9. *Obv.*—(ΔΗΜΟC).

Rev.—ΙΕΡΑΠΟ l., ΛΕΙΤΩΝ r. A. K. Border of dots.

Inv. Wadd., 6118. Nos. 8 and 9 correspond to B. M., 67, 68.

10. *Obv.*—ΔΗΜΟC r. Head of youthful Demos laureate. Border of dots.

Rev.—ΙΕΡΑ r., ΠΟΛΕΙΤΩΝ l. A. K. Border of dots.

Copenhagen, 15 [Pl. I. 6]; Berlin, 90, 91 (very similar but not from the same reverse die as the two preceding coins). The obverses of all three are, on the other hand, from the same die.

11. *Obv.*—(ΔΗΜΟC).

Rev.—ΙΕΡΑΠΟ l., Λ Ε ΙΤΩΝ r. A. K. Border of dots.

Gotha. Nos. 10 and 11 are variants of B. M., 67, 68.

Hero with the double axe and Men), is explained by the fact that the cult of these deities spread considerably in Imperial times.

On Lairbenos, cf. *Philolog.*, lxi. 190 ff. A representation of Helios which is remarkably similar to the Lairbenos on a coin of Tripolis on the Maiandros: B. M., Lydia, 53 (Pl. xl. 6).

12. *Obv.*—ΙΕΡΑCV I., ΝΚΛΗΤΟC r. Young male bust of the Senate, bareheaded, with shoulders draped. Border of dots.
Rev.—ΙΕΡΑΠΟΛΕΙ I., ΤΩΝΝΕΩΚΟ r., in field ΡΩ I., Ν r. A. K. Border of dots.
 B. M., 85; Berlin, 70.
13. *Obv.*—ΒΟΥΛΗ in a straight line on r.; veiled bust of Boule with stephane.
Rev.—[Ι]ΕΡΑΠΟΛΕΙ I., ΤΩΝ r., in straight lines. A. K. Berlin, 12 = *Kl. M.*, 4; with the obverse, cf. XXIII. 1.
14. *Obv.*—(ΙΕ ΒΟΥΛΗ).
Rev.—ΙΕΡΑΠΟ I., Λ Ε ΙΤΩΝ r. A. K. Border of dots.
Inv. Wadd., 6125.
15. *Obv.*—ΑΥΚΑΙΝΕΡΤΡΑΙ I., ΑΝΟCCEBΓΕΡΔΑΚΙΚΟC r. Head of Trajan, laureate. Border of dots.
Rev.—ΙΕΡΑ r., ΠΟΛΕΙΤΩΝ I. A. K. Border of dots.
 Imhoof-Blumer (present collection) = do.
Zur. gr. u. rom. Münzk., p. 152, 7 [Pl. I. 7]; Vienna, 32411.
16. *Obv.*—Antoninus Pius.
Rev.—ΙΕΡΑ r., ΠΟΛΕΙΤΩΝ I. A. K. Border of dots.
 B. M., 134; Paris, 597; *Inv. Wadd.*, 6153, 6154; Vienna, 32810.
17. *Obv.*—Antoninus Pius.
Rev.—ΙΕΡΑΠΟ r., ΛΕΙΤΩΝ I. A. K. Border of dots.
 Berlin 154, 155. Variants of B. M. 135 (Pl. xxxi. 15).
18. *Obv.*—Otacilia Severa.
Rev.—ΙΕΡΑΠΟ I., ΛΕΙΤΩΝ r. A. K. Behind the god a laurel tree. Border of dots.
 Paris, 608 (= Mionnet, iv. 645). This belongs to the group of coins described in *Χάρτες*, p. 484, 8, where the obverse is erroneously described as Lairbenos.

19. *Obv.*—Philippus Junior.

Rev.—ΙΕΡΑΠΟ l., ΛΕΙΤΩΝ r. A. K. Behind the god a laurel-tree.

Copenhagen, 53; similar to the coins described in *Χάριτες*, p. 484, 8.

20. *Obv.*—Philippus Junior.

Rev.—ΙΕΡΑΠΟΛ l., ΕΙΤΩΝ r. A. K. Without laurel-tree.

Inv. Wadd., 6181 [Pl. I. 8].

IIA. ARES.

Obv.—(ΘΕΟΝ CYNKAHTON). Senate.

Rev.—ΙΕΡΑΠΟ r., ΛΙΤΩΝ l. In straight lines; T. Λ. ΜΑΙΑΝΔΡΙΟ[Σ] r. outside. Ares with short chiton, cuirass and helmet, standing to l., holding a figure of Nike Stephanephoros in outstretched r. hand, and l. on spear.

Inv. Wadd., 6127 [Pl. I. 9]. The legend of the obverse has not been found on any other specimen of the coins of Hierapolis; but as the reverse legend shows there can be no question of the attribution of the coin to Hierapolis.

III. ARTEMIS.

1. *Obv.*—Head of young Dionysos, crowned with ivy; thyrsos in front.

Rev.—ΙΕΡΑΠΟ l., Α ΕΙΤΩΝ r. Artemis wearing short chiton and fluttering mantle, standing r., holding bow in outstretched l. hand and drawing arrow from quiver with r.

Berlin, 63; Paris, 566 [Pl. I. 10]; Vienna, 30834.

To the north-east of Hierapolis lies a considerable stretch of high ground, which, now quite bare, must have

been thickly wooded in ancient times and been an excellent hunting ground.

1A. *Obv.*—ΑΡΧΗΓΕΤΗΣ. Tête radiée d'Apollon.

Rev.—ΙΕΡΑΠΟΛΕΙΤΩΝ. Diane chasseresse debout, à gauche, prenant de la main droite une flèche dans son carquois pendu derrière le dos, et tenant un arc de la gauche.

Mionnet, *Suppl.*, vii. 381, from Sestini, *Descr. di altre Med. gr. del Mus. Foft.*, pars iii. p. 78, No. 1.

2. *Obv.*—ΑΡΧΗΓΕ r., ΤΗΣ l. Bust of Apollo Archegetes, with lyre at breast, shoulders draped. Border of dots.

Rev.—ΙΕΡΑΠΟ l., ΛΕΙΤΩΝ r. Cultus-statue of A(rtemis) E(phesia), standing to front, with usual supports, between two stags, looking up. Border of dots.

B. M., 34 (Pl. xxix. 10); *Inv. Wadd.*, 6103; cf. Mionnet, *Suppl.*, vii. 380.

3. *Obv.*—Trajanus.

Rev.—ΙΕΡΑΠΟ l., ΛΕΙΤΩΝ r. A. E.

Paris, 595 = Mionnet, *Suppl.*, vii. 387; St. Petersburg (the reverses of these two coins are from the same die); B. M., 130; Berlin, 152 (these reverses from the same die?); Vienna, 27708; 19875; cf. also Mionnet, iv. 617).

4. *Obv.*—M. Aurelius.

Rev.—ΙΕΡΑΠΟ l., ΛΕΙΤΩΝ r. A. E., with taenia hanging from her hands.

Inv. Wadd., 6155.

5. *Obv.*—Faustina Junior.

Rev.—ΙΕΡΟΠΟ l., ΛΕΙΤΩΝ r. A. E., with taenia hanging from her hands.

Copenhagen, 42 [Pl. I. 11].

6. *Obv.*—Otacilia Severa.

Rev.—ΙΕΡΑΠΟ l., ΛΕΙΤΩΝ r. A. E. between two stags, looking up. Border of dots.

B. M., 150 (Pl. xxxii. 3), 151; Copenhagen, 59.

7.—*Obv.*—Philippus Junior.

Rev.—ΙΕΡΑΠΟ l., ΛΕΙΤΩΝ r. A. E. between two stags, looking up. Border of dots.

Berlin, 196–198; Paris, 612 = Mionnet, iv. 648; cf. also Mionnet, iv. 641 (*obv.* Philippus I.[?]).

IV. ASKLEPIOS (HYGIEIA).

1. *Obv.*—Bust of Asklepios, with serpent-staff at breast. Border of dots.

Rev.—ΙΕΡΑΠΟΛΕ l., ΤΩΝ r. Winged Nemesis standing l. with r. hand holding a piece of her garment at her breast, and in lowered l. bridle. Border of dots.

B. M., 16 (Pl. xxix. 6), 17; Berlin, 50; *Inv. Wadd.*, 6092; Hunter, 3 (ΙΕΡΑΠΟ/ΛΕΙΤΩΝ) = Mionnet, *Suppl.*, vii. 365, is a variant of this type.

2. *Obv.*—Similar. Border of dots.

Rev.—ΙΕΡΑΠΟΛΕΙ l., ΤΩΝ r. Similar. Border of dots.

Berlin, 49 = *M. Gr.*, 400, 106 [Pl. I. 12]. Variant of B. M., 16, 17.

3. *Obv.*—Similar. Border of dots.

Rev.—ΙΕΡΑΠΟΛΕ l., Ι Τ Ω Ν r. Similar. Border of dots.

Copenhagen, 5. The obverses of the last three types are from the same die; the reverses of 1–3 are not from the same dies as any of XXI. Museo Nazionale (Naples), i. 8620, is another specimen of 1–3.

4. *Obv.*—Similar. Border of dots.

Rev.—ΙΕΡΑΠΟ l., ΛΕΙΤΩΝ r. Hygieia standing r., feeding a serpent. Border of dots.

Berlin, 39 [Pl. I. 13]; Athens 5906^m; *Inv. Wadd.*, 6093; Vienna, 27459; the Hague. The obverses from the same dies as those of the preceding types. Cf. B. M., 50.

5. *Obv.*—Head of bearded Herakles, with club on shoulder. Border of dots.

Rev.—ΙΕΡΑΠΟ l., ΛΕΙΤΩΝ r. Asklepios and Hygieia standing face to face; Asklepios to front, head l., upper part of body naked, r. hand on serpent-staff, l. concealed. Hygieia, standing r., feeding a serpent in l. hand. Border of dots.

B. M., 51 (Pl. xxx. 5); Berlin, 25 [Pl. I. 14]; Munich, 17; Copenhagen, 58; Vienna, 19866, 29117; Hunter, 1; cf. also Mionnet, iv. 582; Leake, p. 66.

6. *Obv.*—[Ι]ΕΡΟΠΟ l., ...? r. Head of city goddess, with high turreted crown.

Rev.—Inscription illegible. Asklepios and Hygieia as before.

Copenhagen, 21 (= Ramus, 3). The coin perhaps belongs to Hieropolis in Phrygia.

7. *Obv.*—Head of youthful Dionysos, crowned with ivy (thyrsos before breast?).

Rev.—ΙΕΡΑΠΟ l., ΛΕΙΤΩΝ r. Asklepios and Hygieia as before.

Berlin, 64; *Inv. Wadd.*, 6098. Cf. B. M., 51. The reverses are similar to those of No. 5, but not from the same die: cf. B. M., 51.

8. *Obv.*—Crispina.

Rev.—ΙΕΡΑΠΟ l., ΛΕΙΤΩΝ r. Asklepios standing to front, head l., upper part of body nude, leaning r. hand on serpent-staff, and l. hand concealed. Border of dots.

Berlin, 163 [Pl. I. 15].

9. *Obv.*—ΝΕΩ l., ΚΟΡΩΝ r. Turreted bust of city goddess, shoulders draped. Border of dots.

Rev.—Ι ΕΡΑΠΟΛ l., ΝΕΩΚΟ r., in field, ΕΙΤΩ/Ν l., ΡΩΝ r., coiling bearded serpent. Border of dots.

Paris, 575^a [Pl. I. 16]; Imhoof-Blumer (present collection). On the error in the obverse, cf. *Philolog.*, lxix. 250; on the serpent of Asklepios, cf. *Χάριτες*, p. 484, note.

10. *Obv.*—Elagabalus.

Rev.—ΙΕΡΑΠΟ ΛΕΙΤΩΝ l. and r.; in field ΕΩΚ l., ΟΡΩ r.; Ν in exergue. Similar. Border of dots.

Inv. Wadd., 6165.

The hot springs, whose waters had medicinal powers, that welled up in the cavern at Hierapolis, as well as the great baths of the city itself, explain the large number of coins with representations of these two deities.

V. ATHENA.

1. *Obv.*—Bust of Athena, wearing crested Corinthian helmet and aegis on breast. Border of dots.

Rev.—ΙΕΡΑΠ r., ΟΛΕΙΤΩΝ l. Nemesis standing l. with r. hand plucking chiton from her breast, and holding bridle in lowered l. hand. Border of dots.

B. M., 12 (Pl. xxix. 5); Berlin, 54; *Inv. Wadd.*, 6095 (Pl. xvi. 18).

2. *Obv.*—Similar. Border of dots.

Rev.—ΙΕΡΑΠΟ r., ΛΕΙΤΩΝ l. Nemesis, as preceding. Border of dots.

B. M., 13-15; Berlin, 55; Paris, 564 = Mionnet, iv. 583; Athens; Munich, 6, 9; Copenhagen, 7, 8; Vienna, 19856, 28687, 30890; Hunter, 6; Gotha, three specimens. (Cf. Mionnet, *Suppl.*, vii. 361-362.) The obverses of Nos. 1 and 2 are from the same die.

- 2A. *Obv.*—Bust of Athena l., wearing crested Corinthian helmet and aegis on breast.

Rev.—ΙΕΡΑΠΟΛ r., ΕΙΤΩΝ l.. Zeus Laodikeios, standing l., holding eagle in r. hand, and resting l. on sceptre.

Hunter, 5 = Mionnet, *Suppl.*, vii. 360. Type XXVI. 4 (*obv.* Sarapis) is a variant of this coin.

3. *Obv.*—Head of Athena, in round Athenian helmet with stephane and three crests. • Border of dots.

Rev.—ΙΕΡΑΠΟ r., ΛΕΙΤΩΝ l. Hermes, naked, standing to front, head l., holding purse in r. hand and caduceus and chlamys in l. Border of dots.

B. M., 21; Copenhagen, 65; *Kl. M.*, 2 (Pl. vii. 28); Vienna, 32914. Belongs to the period between Domitian and Antoninus Pius.

4. *Obv.*—Bust of Athena l., wearing crested Corinthian helmet and aegis on breast. Border of dots.

Rev.—ΙΕΡΑΠΟ r., ΛΕΙΤΩΝ l. Similar. Border of dots.

B. M., 49; Berlin, 56, 57; Paris, 563a; Vienna, 19855. Obverses from the same die. The reverses of the three last specimens are similar to Berlin, 56, but not from the same die.

5. *Obv.*—Similar. Border of dots.

Rev.—ΙΕΡΑΠΟ l., ΛΕΙΤΩΝ r. Similar. Border of dots.

Berlin, 58; *Inv. Wadd.*, 6094; Copenhagen, 9; Munich, 18; Gotha; variants of B. M., 49. The obverse similar to the preceding, but not from the same die.

6. *Obv.*—Bust of young Herakles, with club at shoulder, and lion skin knotted round neck. Border of dots.

Rev.—ΙΕΡΑΠΟΛ r., ΕΙΤΩΝ l. Athena helmeted, advancing, wielding spear in uplifted r. hand, and round shield on l. arm. Border of dots.

Berlin, 37 [Pl. I. 17]; variant of B. M., 24.

7. *Obv.* Bust of young Hermes, with caduceus; shoulders draped. Border of dots.

Rev.—ΙΕΡΑΠ l., ΟΛΕΙΤΩΝ r. Athena Promachos. Similar. Border of dots.

Inv. Wadd., 6097 [Pl. I. 18]; Berlin, 38.

8. *Obv.*—Trajan (?).

Rev.—ΙΕ[Ρ]ΑΠΟ r., [ΛΕΙΤΩΝ] l. Helmeted Athena standing r., holding a statuette of Nike Stephanephoros in r. hand, and leaning l. on spear.

Athens, 5905*b*: B. M., 132, a coin of Hadrian, differs slightly from this.

9. *Obv.*—ΙΕΡΑCY l., ΝΚΛΗΤΟC r. Young bust of the Senate, with shoulders draped.

Rev.—ΙΕΡΑΠΟΛΕΙΤ l., ΩΝΝΕΩΚΟ r., ΡΩΝ in field l. Helmeted Athena, in long chiton, standing l., in r. hand phiale, and l. hand on spear against which leans shield. Border of dots.

Vienna, 28160, 29994; Munich, 13. B. M., 128 (Pl. xxxi. 13), a coin of Trajan, differs from this purely conventional representation, which occurs frequently on Phrygian coins.

10. *Obv.*—ΙΕΡΑCYN r., ΚΛΗΤΟC l. Young bust of the Senate, shoulders draped.

Rev.—ΙΕΡΑΠΟ r., ΛΕΙΤΩΝ l. Athena standing r., r. hand on spear, and l. on shield. Naked Hermes l., facing her, holding purse in r. and caduceus and chlamys in l. Border of dots.

Athens, 5905*a* = *Kl. M.*, 6; Imhoof, present collection = do., *Zur griech. u. röm. Münzk.*, p. 151, 3; Pl. vi. 17 [Pl. II. 19]. The coin belongs to the time of Trajan (cf. Imhoof, *Kl. M.*, 6). The reverses of the two coins are from the same die as the following type (*obv.* Trajan).

11. *Obv.*—Trajan.

Rev.—ΙΕΡΑΠΟ ρ., ΛΕΙΤΩΝ Ι. Similar.

B. M., 129 (Pl. xxxi. 14); *Inv. Wadd.*, 6151.

12. *Obv.*—M. Aurelius as Caesar.

Rev.—ΙΕΡΑΠΟ ρ., ΛΕΙΤΩΝ Ι. Athena standing ρ., ρ. hand on spear and Ι. hand on the shield. Naked Hermes Ι., facing her, holding a purse in ρ. hand and caduceus and chlamys in Ι. Border of dots.

Berlin, 157; *Inv. Wadd.*, 6156. Their reverses are similar, but not from the same dies as 10 and 11.

13. *Obv.*—M. Aurelius as Caesar.

Rev.—ΙΕΡΑΠΟ
ΛΕΙΤΩΝ above, ΧΡΥΚΟΡΟΑΚ in exergue. Athena standing ρ., leaning ρ. hand on spear and Ι. on shield; facing her, standing to Ι., naked Hermes, holding purse in ρ. hand and caduceus and chlamys in Ι.; between them the bearded (?) river-god Chrysoroas lying on ground to Ι., upper half of body naked, holding in ρ. hand poppy (?), and leaning Ι. elbow on an over-turned vase, from which water flows. Border of dots.

Berlin, 156 [Pl. II. 20].

Athena and Hermes appear on these coins as the protectors of the very extensive commerce of Hierapolis.

VI. BULL.

Obv.—Bust of Apollo Lairbenos, radiate; shoulders draped.

Rev.—ΙΕΡΑΠΟΛ above, ΕΙ ρ., ΤΩΝ in exergue. Bull advancing ρ.

Berlin, 31 [Pl. IV. 59]; *Inv. Wadd.*, 6106. The type of the bull is no doubt

connected with the bull-sacrifice, the so-called Taurobolia, which was celebrated at the cavern of Hierapolis in honour of Kybele ; cf. *Philolog.*, lxix. 187.

VII. BULL'S HEAD.

1. *Obv.*—Bust of Apollo Lairbenos, radiate; shoulders draped. Border of dots.

Rev.—ΙΕΡΑΠΟ r., ΛΕΙΤΩΝ l. Bull's head facing, above it a large crescent, above which are two stars joined by a vertical line. Border of dots.

Imhoof-Blumer (present collection) [Pl. IV. 60] = do., *Zur gr. u. röm. Münzk.*, p. 151, 2; Berlin, 32 = *M. Gr.*, 401, 109 (with note); cf. also *op. cit.* and *Philolog.*, lxix. 194.

2. *Obv.*—Head of young Herakles, with lion's skin.

Rev.—ΙΕΡΑΠΟ r., ΛΕΙΤΩΝ l. Similar.

Inv. Wadd., 6186. The reverse is not from the same die as the reverses of the two preceding coins. The type is similar to that of the two coins of Hierapolis, B. M., 1; *Kl. M.*, 8, 244, 1 (but belonging to Hierapolis). To this type probably belongs also the coin in Mionnet, iv. 620 (from Vaillant, *Num. gr.*). *Obv.* ANTINOON ΘΕΟΝ. Buste d'Antinous. *Rev.* ΙΕΡΑΠΟΛΙC. Croissant avec une étoile. The description, however, is quite inaccurate. The bull's-head type is probably connected with Men; cf. *Philolog.*, lxix. 194

VIII. CHRYSOROAS.

1. *Obv.*—ΔΗΜΟC. Bust of young Demos, bareheaded (?). Border of dots.

Rev.—ΙΕΡΑΠΟΛΙ(!) Τ Ω Ν above, ΧΡΥCΟ/ΡΟΑC in exergue. Bearded river-god Chrysoroas, with upper half of body naked lying l. on ground, holding in r. hand, which rests on knee, poppy, leaning l.

arm on inverted vase from which water flows.
Border of dots.

B. M., 43; Gotha. The reading of the reverse is confirmed by the Gotha specimen.

2. *Obv.*—ΔΗΜΟC r. Bust of young Demos, bareheaded (?); shoulders draped. Border of dots.

Rev.—ΙΕΡΑΠΟΛΙ (!) ΤΩΝ above, ΧΡΥCΟΡΟ/ΑC in exergue. Similar bearded (?) river-god Chrysoroas. Border of dots.

Berlin, 85; Paris, 576 = Mionnet, iv. 595.
Variants of B. M., 43.

3. *Obv.*—ΔΗ r., ΜΟC l. Bust of bearded Demos, bareheaded; shoulders draped. Border of dots.

Rev.—ΙΕΡΑΠΟΛΕΙΤΩΝ, in exergue ΧΡΥCΟ/ΡΟΑC. Bearded river-god Chrysoroas as before. Border of dots.

Berlin, 86; Munich, 8. Variants of B. M., 44 (Pl. xxx. 3), 45.

- 3A. *Obv.*—ΔΗΜΟC r. Similar. Border of dots.

Rev.—ΙΕΡΑΠΟΛΕ [Ι]ΤΩΝ, in exergue ΧΡΥCΟ/ΡΟΑC. Similar. Border of dots.

Vienna, 32913.

4. *Obv.*—(ΔΗΜΟC).

Rev.—ΙΕΡΑΠΟΛΕΙΤΩΝ, in exergue ΝΕΩΚΟΡ/ΩΝ. Similar. Border of dots.

Copenhagen, 16. Variant of B. M., 70.

5. *Obv.*—ΙΕΡΑΠΟΛΕΙ l., ΤΩΝ r. Bust of Artemis l., with quiver and bow; shoulders draped. Border of dots.

Rev.—ΧΡΥCΟ/ΡΟΑC in exergue. Similar. Border of dots.

Imhoof, present collection (Pl. II. 21]; Berlin, 61, 62 (cf. *M. Gr.*, 403, 111); *Inv. Wadd.*, 6100.

6. *Obv.*—Caracalla (Elagabalus?).

Rev.—ΙΕΡΑΠΟ l., ΛΕΙΤΩ r., N in field l., ΝΕΩΚΟΡ/ΩΝ in exergue. Similar. Border of dots.

B. M., 142 (cf. 141); Berlin, 177, 178 (= *Kl. M.*, 33).

7. *Obv.*—Gordianus.

Rev.—ΙΕΡΑ l., ΠΟ Λ r., ΕΙΤΩΝ in exergue. River-god Chrysoroas, as before; cornucopiae in l. arm which rests on vase. Border of dots.

Berlin, 183; the only coin of Hierapolis that has as yet been found with the portrait of Gordianus.

The Chrysoroas was most probably a mountain stream flowing to north of Hierapolis. As the name shows, its sands must have contained gold. On games on the Chrysoroas, cf. von Papen, *loc. cit.*

IX. DEMETER.

1. *Obv.*—ΛΑΙΡΒΗΝΟC r. Bust of Lairbenos radiate; shoulders draped. Border of dots.

Rev.—[ΙΕΡ]ΑΠΟΛ[ΕΙ]ΤΩΝ r. Demeter, in biga, going to r., holding flaming torch in each hand.

Berlin, 65 = *M. Gr.*, 401, 107 [*Pl. II. 22*], described by Imhoof-Blumer, *loc. cit.*, as Selene. A second specimen (*rev.* worn smooth) is Vienna, 19868. The type of the reverse is certain, as this variety of Lairbenos is only once found on the obverse of coins of Hierapolis. The reproduction of the obverse is from the Vienna specimen.

2. *Obv.*—ΛΑΙΡΒΗΝ r., ΟC l. Bust of Lairbenos radiate; shoulders draped. Border of dots.

Rev.—ΙΕ[ΡΑΠΟΛΕΙΤΩΝ] Above and on r. Demeter, as before. Border of dots.

Gotha. The attribution of the coin to Hierapolis is confirmed by the obverse type. This type of Demeter is rare; at least the *B. M. Cat.* has not another in Phrygia, nor can Imhoof

quote another for Asia Minor. There are two similar types of Selene (or Hekate) at Hierapolis (B. M., 55, 56). As the goddess is represented on these two coins with the crescent on her shoulders, she cannot be Demeter, nor can the coins be from the same die. The two goddesses, however, are represented as very similar to one another.

3. *Obv.*—Bust of young Dionysos, crowned with ivy, shoulders draped; thyrsos in front. Border of dots.

Rev.—ΙΕΡΑΠΟ l., ΛΕΙΤΩΝ r. Demeter standing l., holding ear of corn in r. hand, and leaning l. on torch. Border of dots.

Gotha = Mionnet, *Suppl.*, vii. 367; cf. *Kl. M.*, 3.

4. *Obv.*—(ΙΕΡΑ CYNKΛΗΤΟΣ.)

Rev.—ΙΕΡΑΠΟΛ r., ΕΙΤΩΝ l. Demeter, as before, with veil. Border of dots.

Inv. Wadd., 6128; Copenhagen, 25 (= Ramus, 6); cf. also Mionnet, iv. 599. The reverse legend of a similar coin (*Suppl.*, vii. 382) is ΙΕΡΑΠΟΛΕΙΤΩΝ ΝΕΩΚΟΡΩΝ. B. M., 127 (Pl. xxxi. 12; obverse Agrippina) is quite a different variety. The goddess is seated on a throne to l., holding ear of corn and poppy in r.

5. *Obv.*—Caracalla? Elagabalus?

Rev.—ΙΕΡΑΠΟΛ Ε l., ΙΤΩΝΝΕΩΚΟΡ r., ΩΝ in field r. Demeter advancing to r., holding lighted torches in r. hand behind, and in lowered l. hand. Flowing veil over head, the ends of which fall down over arms. Border of dots.

Berlin, 168 = *Kl. M.*, 34 [Pl. II. 23].

6. *Obv.*—Caracalla? Elagabalus?

Rev.—ΙΕΡΑΠΟΛΕ ΙΤ l., ΩΝΝΕΩΚΟΡΩΝ r. Demeter standing l., ear of corn in r. hand, and leaning l. on lighted torch. Border of dots.

Berlin, 172 [Pl. II. 24], 173; *Inv. Wadd.*, 6163; cf. also Mionnet, iv. 629.

7. *Obv.*—Caracalla? or Elagabalus?

Rev.—ΙΕΡΑΠΟΛΕΙ Τ l., ΩΝΝΕΩΚΟΡΩ r., N in field l.
Similar. Border of dots.

Munich. *Inv. Wadd.*, 6194 (*obv.*, Caracalla or Elagabalus; *rev.*, Ι ΕΡΟΠΟ l., ΛΕΙΤΩΝ r. Demeter standing l., ear of corn in lowered r., leaning l. on a torch), is a coin of Hieropolis in Phrygia.

8. *Obv.*—Caracalla? Elagabalus?

Rev.—ΙΕ Ρ Α Π Ὡ ΛΕΙ ΤΩΝ, in exergue ΝΕΩΚΟΡΩ / N.
Demeter standing r. in biga of winged serpents, holding flaring torches in r. hand behind, and in uplifted l. hand; flowing veil on head.
Border of dots.

Berlin, 170 [Pl. II. 25]. A second and similar specimen is Mionnet, *Suppl.*, vii. 393 (Demeter l.).

9. *Obv.*—Philippus I.

Rev.—ΙΕ Ρ ΑΠΟΛΕΙΤΩ N above. Demeter standing l. in biga of winged serpents, holding torches in uplifted r. and lowered l. hand. Border of dots.

Inv. Wadd., 6172 [Pl. II. 26]; cf. *Kl. M.*, 36.

Below the plateau on which Hierapolis is built lies the plain of the Lykos valley, the fertility of which renders it particularly adapted for the cultivation of cereals.

X. DIONYSOS.

1. *Obv.*—Bust of city-goddess, with turreted crown; shoulders draped.

Rev.—[ΙΕΡΑΠ]ΟΛ ΕΙΤΩΝ Dionysos, naked except for chlamys hanging over his arm, standing l., kantharos in r. hand, and l. on thyrsos; at his feet a panther l., looking back (upwards?).

Hunter, 2 = Mionnet, *Suppl.*, vii. 371.
Variant of B. M., 48 (reverses of the two from the same die?).

2. *Obv.*—Head of Dionysos, crowned with ivy, thyrsos in front. Border of dots.

Rev.—ΙΕΡΑΠΟΛ ΕΙΤΩΝ: Dionysos, naked except for chlamys, to front, head l., kantharos in r. over panther at his feet, l. hand on thyrsos. Border of dots.

B. M., 48. This type of Dionysos is frequent on Phrygian coins; cf. B. M. Index. The thyrsos alone, with taenia around it, is found on a coin of Hierapolis, B. M., 126 (*obv.* Agrippina). The volcanic soil of Hierapolis must have been peculiarly suited for viniculture.

3. *Obv.*—ΑΥΤ. ΑΙΛΙΟC. ΑΝΤΩΝΕΙΝΟC. Tête laurée d'Antonin le pieux.

Rev.—ΕΠΙ . . . ΙΕΡΑΠΟΛΕΙΤΩΝ Bacchus nu et debout, le cantharus d'une main, le thyrsos de l'autre.

Mionnet, iv. 621 (Cab. de M. Cousinery).

4. *Obv.*—ΑΥΤΚΜΑΥΡ l., ΑΝΤΩΝΕΙΝΟCCEB r. Bust of Caracalla, with cuirass and paludamentum.

Rev.—ΙΕΡΑΠΟΛΕΙΤ l., ΩΝΝΕΩΚ r., in field l. ΟΡ ΩΝ Dionysos, naked except for cloak hanging from his shoulders, standing l., kantharos in lowered r. hand, l. on thyrsos. Border of dots.

Imhoof (present collection) [Pl. II. 27]; Mionnet, *Suppl.*, vii. 396.

XI. DOUBLE AXE.

1. *Obv.*—ΦΑΒΙΟC r., ΜΑΞΙΜΟC l., in straight lines; head of Fabius Maximus (pro-consul under Augustus, 5 B.C.).

Rev.—ΖΩΣΙΜΟC r., in straight lines, ΙΕΡΟΠΟΛΕΙΤΩΝ
ΦΙΛΟΠΑΤΡΙC ΧΑΡΑΞ
l. Double axe, the handle bound with taenia.

B. M., 93 (Pl. xxxi. 1), 94; Berlin, 106 (with duplicate); Copenhagen, 55; Munich, 19; also Paris, 582 (but with *obv.* Augustus: otherwise *Xáριτες*, p. 486).

2. *Obv.*—Nero.

Rev.—ΣΥΛΛΙΟΣ r., in straight lines, ΙΕΡΑΠΟΛΙΤΩΝ l.
ΑΝΤΙΟΧΟΣ

Double axe with serpent twined round handle.

B. M., 117; Berlin, 148 = Pinder und Friedlander, i. 83; Paris, 592 = Mionnet, iv. 616; Vienna, 32912; Imhoof (present collection). The legend on the reverse is confirmed by the Berlin and Paris specimens.

3. *Obv.*—Augustus.

Rev.—ΜΑΤΡΩΝ r., in straight lines, ΙΕΡΑΠΟΛΙΤΩΝ
ΑΠΟΛΛΩΝΙΟΥ l.

Double axe with serpent twined round handle, surmounted by head of Lairbenos r., radiate.

B. M., 106 (Pl. xxxi. 7); Berlin, 116 = *Arch. Zeit.*, 1847, 125; Berlin, 117 = *Kl. M.*, 22; *Inv. Wadd.*, 6140; Munich.

4. *Obv.*—ΝΕΡΩΝ l., ΚΑΙΣΑΡ r. Bust of Nero. Border of dots.

N.B.—The obverse of the Hague specimen is countermarked with the head of Lairbenos.

Rev.—ΙΕΡΑΠΟΛΕΙΤΩΝ l., Ρ(?)ΕΛΟΥΙΟΣ in straight lines
ΟΠΤΟΜΟΣ r. Cornucopiae, with fruits and fillet, double axe in field behind. Border of dots.

Berlin, 150 = *Kl. M.*, 28; Berlin, 149 [Pl. II. 28] = *Gr. M.*, 739, 697; Vienna, 19874 = *N. Z.*, iv. 239; Hague. On types 1-4, cf. *Philolog.*, lxix. 192.

XII. ΗΕΚΑΤΕ.

Obv.—Elagabalus.

Rev.—ΙΕΡΑΠΟΛΕΙΤ; in field, ΩΝ l.; ΝΕΩΚ[ΟΡΩΝ] r.
Hekate triformis, with torches in hands. Border of dots.

Gotha = Mionnet, iv. 632 = Sestini, *Lettere*, tom. ix. p. 63.

XIII. HERAKLES.

1. *Obv.*—ΙΕΡΑΠΟΛΙΣ r. Bust of city-goddess with turreted crown; shoulders draped. Border of dots.

Rev.—No legend. Bearded Herakles standing naked to r., r. hand at back, l. resting on club covered by lion's skin. Border of dots.

Imhoof-Blumer (present collection) = do., *Z. griech. u. röm. Münzk.*, p. 152, 4, Pl. vi. 15 [Pl. II. 30].

2. *Obv.*—No legend. Bust of city-goddess with turreted crown; shoulders draped. Border of dots.

Rev.—ΙΕΡΑΠΟ l., ΛΕΙΤΩΝ r. Similar. Border of dots.

Berlin, 24 = *Kl. M.*, 7. The above example shows that the identification of the obverse type as Tyche, given there, is erroneous.

3. *Obv.*—(ΒΟΥΛΗ).

Rev.—ΙΕΡΑΠΟ l., ΛΕΙΤΩΝ r. Herakles, as before; the lion's skin is not well defined. Border of dots.

Inv. Wadd., 6124.

4. *Obv.*—No legend. Bust of city-goddess with turreted crown; shoulders draped.

Rev.—ΙΕΡΑΠΟ l., ΛΕΙΤΩΝ r. Bearded Herakles standing l. naked, l. hand on club covered by lion's skin. Border of dots.

Gotha [Pl. II. 31].

5. *Obv.*—ΑΥ. Κ. Μ. ΑΥΡ. ΑΝΤΩΝΕΙΝΟΣ. CЄ. Buste de Caracalla lauré, avec une cuirasse sur la poitrine.

Rev.—ΙΕΡΑΠΟΛΕΙΤΩΝ. ΝΕΩΚΟΡΩΝ. Temple octostyle, dans l'entrée duquel est Hercule debout, la main droite posée sur sa massue.

Mionnet, *Suppl.*, vii. 395, from Pell., *Suppl.*, i. p. 37, Pl. ii. No. 6.

Herakles was worshipped in Hierapolis as the patron

deity of athletes; in this capacity he was called *Κρατερόφρων* (*Inscr.*, 46). Special games were instituted in his honour. The gymnasia, of which the town had two, were dedicated to him. Statues of the god are mentioned (*Inscr.*, 27).

XIV. HERO (STANDING).

1. *Obv.*—ΑΡΧΗΓΕ r., ΤΗΘ l. Bust of young Apollo-Lairbenos radiate; shoulders draped. Border of dots.

Rev.—ΙΕΡΑΠ r., ΟΛΕΙΤ ΩΝ l. Young Hero standing l., with cuirass or short chiton, branch, or wreath in outstretched r. hand, double axe and chlamys in l. Border of dots.

B. M., 23 (Pl. xxix. 8); Berlin, 34; Paris, 565 = Mionnet, iv. 585; Vienna, 33264.

2. *Obv.*—Similar.

Rev.—ΙΕΡΑΠ r., ΟΛΕΙΤΩ Ν l. Similar. Border of dots.
Berlin, 35.

3. *Obv.*—Similar.

Rev.—ΙΕΡΑΠΟ r., ΛΕΙΤ ΩΝ l. Similar. Border of dots.
Berlin, 33.

4. *Obv.*—Similar.

Rev.—ΙΕΡΑΠΟ r., ΛΕΙΤΩΝ l. Similar. Border of dots.
Berlin, 36. Nos. 2-4 are variants of B. M., 23.
The obverses of all four are from the same die.

5. *Obv.*—ΣΕΥC l., ΤΡΩΙΟC r. Head of Zeus Troios bound with taenia. Border of dots.

Rev.—ΙΕΡΑΠΟ r., ΛΕΙΤΩ Ν l. Young Hero, standing l., with cuirass; branch in r., in l. chlamys and double axe. Border of dots.

Inv. Wadd., 6090 (Pl. xvi. 17 [Pl. II. 32]).
Variant of B. M., 41. Coin of about the time

of Hadrian (cf. *Kl. M.*, 12). The Hero is represented as beardless on this coin, while he is bearded on the following coins. Whether we ought to recognize in Nos. 5-7 the representation of an Emperor, as Imhoof supposes (cf. *Kl. M.*, 11, 12), is doubtful. On the obverse die, cf. under XXXII.

6. *Obv.*—ΣΕΥCTPΩ r., IOC l. Similar. Border of dots.

Rev.—ΙΕΡΑΠΟ ΛΕ l., Ι ΤΩΝΝΕΩ r., ΚΟΡ/ΩΝ in field l. and r. Similar. Border of dots.

B. M., 47 (Pl. xxx. 4); Berlin, 99 = *Kl. M.*, 12. The obverse from the same die as the obverse of *Kl. M.*, 13 (cf. above, I. 2).

7. *Obv.*—ΙΕΡΑCV l., ΝΚΛΗΤΟC r. Youthful bust of Senate, bareheaded; shoulders draped. Border of dots.

Rev.—ΙΕΡΑΠΟ ΛΕ l., Ι ΤΩΝΝΕΩ r., ΚΟΡ/ΩΝ in field l. and r. Similar. Border of dots.

Berlin, 100 = *Kl. M.*, 11. Variant of B. M., 84. The reverse from the same die as No. 6. The coins of types Nos. 6 and 7 belong to the third century (cf. *Kl. M.*, 10).

8. *Obv.*—Similar. Border of dots.

Rev.—ΙΕΡΑΠ ΟΛΕΙ l., Τ ΩΝΝΕΩΚ r., ΟΡ Ω/Ν in field l. and r. Similar. Border of dots.

Inv. Wadd., 6130; Munich, 14. A second variant of B. M., 84.

9. *Obv.*—(ΔΗΜΟC).

Rev.—ΙΕΡΑΠΟ r., ΛΕΙΤ ΩΝ l. Similar. Border of dots.

Inv. Wadd., 6121.

- 9A. *Obv.*—ΔΗΜΟC r. Bust of young Demos, bareheaded; shoulders draped. Border of dots.

Rev.—ΙΕΡΑΠΟ r., ΛΕΙΤΩ Ν l. Similar. Border of dots.

Vienna, 33413. Variant of the preceding type.

10. *Obv.*—Augustus.

Rev.—ΜΕΝΙΣΚΟΣ/ΔΙΦΙΛΟΥ r., ΙΕΡΑΠΟΛΙΤΩΝ l., in field
r. $\overset{\circ}{\Gamma}$, l. $\cdot\Gamma$. Naked Hero standing l., cloak
over back, in r. hand a phiale, in l. double
axe.

Berlin, 118 = *Kl. M.*, 23 ; Paris, 586 =
Mionnet, iv. 607 ; *Inv. Wadd.*, 6133 ; Copen-
hagen, 34 ; Vienna, 29945, 32390.

11. *Obv.*—Antoninus Pius.

Rev.—ΙΕΡΑΠΟ r., ΛΕΙΤΩ Ν l. Young Hero standing
l., with short chiton or cuirass and shoes,
holding branch in r. hand, in l. double axe
and chlamys.

Copenhagen, 41. Variant of B. M., 133.

12. *Obv.*—Elagabalus.

Rev.—ΙΕΡΑΠΟΛΕΙΤΩ l., ΝΝΕΩΚΟ r., ΡΩΝ in field l.
Naked Hero standing l., cloak on back ; in r.
hand fruits (?), and in l. double axe. Border
of dots.

Berlin, 176 ; Paris, 604. Cf. also under
Dionysos.

13. *Obv.*—Otacilia Severa.

Rev.—ΙΕΡΑΠ Ο l., ΛΕΙΤΩΝ r. Similar. Border of dots.

Inv. Wadd., 6180 [*Pl. II. 33*]. Is the
type on a unique coin of Hierapolis in the
B. M. (149, *obv.* Philip I) connected with this
Hero? : two naked (?) figures standing face to
face, each with mantle hanging behind him,
holding spear in l. and phiale in r. over
lighted altar between them. Cf. *Philolog.*,
lxix. 190.

XV. HERO (RIDING).

1. *Obv.*—ΣΕΥC l., ΒΩΣΙOC r. Head of Zeus Bozios bound with taenia (?). Border of dots.

Rev.—ΙΕΡΑ below, ΠΟΛΕΙΤ l., Ω above, Ν r. Young Hero, riding to r., with fluttering chlamys, double axe on shoulder. Border of dots.

B. M., 42 (Pl. xxx. 2); *Inv. Wadd.*, 6088 (Pl. xvi. 16); Copenhagen, 2; Dresden; cf. Mionnet, *Suppl.*, vii. 375.

2. *Obv.*—Similar.

Rev.—ΙΕΡΑΠΟΛΕΙΤ below and l., Ω above, Ν r. Similar. Border of dots.

Berlin, 15 = *M. Gr.*, 401, 106; Munich, 7 [Pl. II. 34]; Vienna, 32809. Variant of B. M., 42. The obverses of both types are from the same die. Cf. Imhoof-Blumer, on *M. Gr.*, 401, 106; *Philolog.*, lxi. 236.

3. *Obv.*—ΔΗΜOC r. Head of young Demos, laureate. Border of dots.

Rev.—ΙΕΡΑΠ l., Ο above, ΛΕΙΤΩΝ r. Similar. Border of dots.

Berlin, 89; Vienna, 28725. Variant of B. M., 69.

4. *Obv.*—(ΔΗΜOC).

Rev.—Ι Ε ΡΑΠΟΛΕΙΤΩ Ν r. Similar. Border of dots.

Inv. Wadd., 6117 [Pl. III. 35]. Variant of B. M., 69. For a further representation of this Hero, with Demos on the obverse, cf. Museo Nazionale (Naples), i. 8615.

5. *Obv.*—ΒΟΥΛΗ r. Bust of Boule, veiled and laureate. Border of dots.

Rev.—ΙΕ ΡΑΠΟΛΕΙΤΩΝ r. Similar. Border of dots.

Berlin, 11; *Inv. Wadd.*, 6123 (Pl. xvi. 23); Vienna, 30838, 30910; Copenhagen, 14 (=Ramus, 2 = Mionnet, *Suppl.*, vii. 374). The reverses from the same die; cf. B. M., 77, 78 (Pl. xxx. 8); time of Caracalla.

6. *Obv.*—ΓΕΡΟ 1., VCIA r. Bust of Gerousia, veiled and laureate. Border of dots.

Rev.—ΙΕΡΑ 1., ΠΟΛΕΙΤ r., ΩΝ below. Similar. Border of dots.

Copenhagen, 13. Variant of B. M., 79 (Pl. xxx. 9), 80.

7. *Obv.*—ΓΕ 1., ΡΟVCIA r. Similar. Border of dots.

Rev.—ΙΕΡΑ 1., ΠΟΛΕΙΤ r., ΩΝ below. Similar. Border of dots.

Berlin, 82 [Pl. III. 36]; Gotha (*rev.*). Variant of B. M., 79, 80.

8. *Obv.*—Similar. Border of dots.

Rev.—ΙΕΡΑΠ 1., Ο ΛΕΙΤΩ Ν r. Similar. Border of dots.

Berlin, 83, 84; Vienna, 30835, 19864; Paris, 573 (*rev.*) = Mionnet, iv. 592. Variant of B. M., 81. For further representations of this Hero with Gerousia on obverse, cf. Museo Nazionale (Naples), i. 8616; Leake, p. 66; *Suppl.*, p. 58.

The same Hero (riding) is frequently found on coins of the earlier Imperial period which also have magistrates' names. As these have already been collected in *Χάριτες*, pp. 485 ff., I shall only briefly detail the specimens concerned here again.

Obv.—Augustus. *Rev.*—ΧΑΡΩΠΙΔΗΣ ΣΩΣΤΡΑΤΟΥ.

Obv.—Claudius. *Rev.*—Μ. ΣΥΛΛΙΟΣ ΑΝΤΙΟΧΟΣ ΓΡΑ.

Obv.—Claudius. *Rev.*—Μ. ΣΥΛΛΙΟΣ ΑΝΤΙΟΧΟΣ.

Obv.—Nero. *Rev.*—ΧΑΡΗΣ Β ΠΑΠΙΑΣ.

Obv.—Nero. *Rev.*—ΠΕΡΕΙΤΑΣ · Β · ΓΡ.

Obv.—Nero. *Rev.*—ΤΙ · ΔΙΟΝΥΣΙΟΣ.

9. *Obv.*—M. Aurelius Caesar.

Rev.—ΙΕΡΑΠΟΛΕΙΤ ΩΝ r. Similar. Border of dots.

Berlin, 158 [Pl. III. 37]. Variant of
B. M., 137 (Pl. xxxii. 1).

10. *Obv.*—Similar.

Rev.—ΙΕΡΑΠΟΛΕΙΤ r. and below, Ω Ν l. Similar.
Border of dots.

Paris, 598 = Mionnet, iv. 622; Berlin, 159.
Variant of B. M., 137 (Pl. xxxii. 1). In older
descriptions (*e.g.* Mionnet, Leake, *Inv. Wadd.*,
&c.), this riding Hero is wrongly described as
an Amazon: cf. *Philolog.*, lxix. 236.

LEO WEBER.

(*To be continued.*)

THE FIRST CORBRIDGE FIND.

(See Plates V., VI.)

IN a recent number of the *Numismatic Chronicle* (see Ser. III., Vol. XII., pp. 265 ff.), Mr. H. H. E. Craster has given a full account of the large hoard of Roman Imperial gold coins (*aurei*) which were unearthed at Corbridge, in Northumberland, during the excavations carried out there in the season of 1911. Illustrations of all the coins, duplicates excepted, have been supplied; so that we possess a complete record of this find, the most remarkable of its class that has ever taken place in England. The coins numbered 160 specimens in all, and extended from the reign of Nero to that of M. Aurelius, covering a period of very close on one hundred years (*circa* 64–160 A.D.). Previously in 1908 another hoard of Roman gold coins had been unearthed on the same site, though not in precisely the same spot; but these belong to a considerably later period of the Roman occupation of Britain. This hoard consisted of solidi, forty-eight in number, ranging from Valentinian I to Magnus Maximus, and extends only over about twenty years or a little more (*circa* 364–385 A.D.). In the Report of the Corbridge Committee for 1908–1909,¹ Mr. Craster dealt with this hoard also; but he described the coins in a very general way, devoting

¹ See *Archaeologia Aeliana*, 3rd ser., vol. v. pp. 47–56.

his remarks chiefly to the history of the period, in order to account for their burial at a particular time. He has supplemented this account with a more minute description of the coins as an appendix to the Second Corbridge Find on the ground, as he states, that no description of these had as yet been given in the *Numismatic Chronicle*. I venture to think, however, that in this instance Mr. Craster has not done full justice to the hoard; for in describing the more common type as "two Emperors seated facing, holding a globe, between them a palm-branch," &c., he has certainly missed its historical value.

I purpose, therefore, first of all, to describe the coins fully, and with more than usual minuteness, for reasons which I think will be appreciated, and then briefly to discuss the types, pointing out their historical importance. I think it will then be seen that this find will help us very considerably to arrive at the sequence of the issues of more than one Emperor who is represented in it. The circumstances connected with the discovery of the hoard have already been detailed by Mr. Craster, and I need only add that under an arrangement with H.M. Treasury both hoards in their entirety are now in the National Collection, and that they are kept separate from the rest of the series.

VALENTINIAN I.

364-375 A.D.

Rome.

1. *Obv.*—DNVALENTINI ANVS PFAVG Bust of Valentinian r., diademed, and wearing paludamentum and cuirass.

Rev.—RESTITVTOR REIPVBLICAE Emperor standing front, head turned to r.; he is laureate and wears paludamentum, cuirass and

boots (*calcei*); in r. hand he holds the labarum, and on l. a globe surmounted by Victory;² in the exergue, RT (*Tertia*).

N. 0.85. Wt. 69.0 grs. [Pl. V. 1.]

2. Similar; but in the exergue on the reverse, RQ³ (*Quarta*).

N. 0.85. Wt. 69.4 grs. (*Rev.* double struck.) [Pl. V. 2.]

Treves.

- 3-4. *Obv.*—Similar.

Rev.—VICTOR IAAVGG The Emperors, Valentinian I and Valens,⁴ seated facing on throne and supporting on their r. hands a globe; between them a palm-branch; behind the throne is seen the half-length figure of Victory facing; the back of the throne on one of the specimens is ornamented, X; in the exergue, TROBC⁵ (*Tertia*).

N. 0.8. Wt. 68.8 (2) grs. [Pl. V. 3.]

² Solidi of this type only were struck by Valentinian I at Rome.

³ This letter is a little doubtful, its form being peculiar. On the whole, on comparison with the silver and copper coins struck at Rome during this reign, I am of opinion that it is intended for the letter Q, denoting the 4th *officina*. On some of the copper coins of Valentinian I struck at Rome one meets with the full word QVARTA; and both on the silver and copper this is abbreviated into Q. Numbers, not letters, appear to have been employed at Rome at this time to mark the *officinae*.

⁴ For the identification of these figures, see below, p. 46 f.

⁵ These two coins, though of the same type and weight, were struck from different dies, both obverse and reverse. For this issue at Treves there appear to have been used two series of letters to mark the *officinae*; one alphabetical, A, B, C, &c.; the other numerical, as P (*Prima*), S (*Secunda*), T (*Tertia*), &c. Symbols, stars, pellets, &c., were also used.

VALENS.

364-378 A.D.

Treves.

5. *Obv.*—DNVALENS PFAVG Bust of Valens r., diademed, wearing paludamentum and cuirass.

Rev.—VICTOR IAAVGG The Emperors, Valens and Valentinian I, seated facing, holding globe, &c.,⁶ as on No. 3; the back of the throne is ornamented, X; in the exergue, TROBT⁷ (*Tertia*).

N. 0·8. Wt. 68·4 grs.

6. Similar; but on the reverse the back of the throne is ornamented, ✕; in the exergue, TROBC (*Tertia*).

N. 0·85. Wt. 68·8 grs. [Pl. V. 4.]

GRATIAN.

Augustus, 367 A.D.; succ. 375 A.D.; died 383 A.D.

Constantinople.

7. *Obv.*—DN GRATIA NVSPFAVG Youthful bust of Gratian r., wearing diadem formed of pearls with jewel at top of head, paludamentum and cuirass.

Rev.—PRINCIPIVM IVVENTVTIS Gratian standing r., nimbate, wearing paludamentum, cuirass, and boots (*calcei*); he holds spear in r.

⁶ The figures on the reverse are the same as those shown on similar coins of Valentinian I. There are other coins of Valens of the same type, which show the seated figure on the right much smaller in stature than the one on the left. This smaller figure I would identify as of Gratian, and would place the issue of such pieces after the death of Valentinian I, whereas the above pieces were struck before his death.

⁷ This and the next coin illustrate the two methods of numbering the *officinae*; one by means of a numeral, the other alphabetical.

hand and globe in l. ; in the exergue, CONS (*Constantinopolis*) between star on l. and wreath on r.

N. 0.85. Wt. 82.2 grs.⁸ [Pl. V. 5.]

Treves.

8. *Obv.*—Similar to the preceding ; head larger.

Rev.—VICTOR IAAVGG. The Emperors, Valentinian I and Valens, seated facing on throne, and supporting on their r. hands a globe ; between them a palm-branch ; behind the throne is seen the half-length figure of Victory facing, wings spread ; the back of the throne is ornamented, X ; in the exergue, TROBS⁹ (*Secunda*).

N. 0.8. Wt. 69.2 grs. [Pl. V. 6.]

9. *Obv.*—Similar ; same portrait.

Rev.—Similar ; but the two seated figures are those of Gratian¹⁰ and his brother Valentinian II, who is represented as a youth ; same ornamentation to throne ; in the exergue, TROBT (*Tertia*).

N. 0.85. Wt. 69.4 grs. [Pl. V. 7.]

10–12. Similar ; but the ornamentation of the throne, X ; same mint-marks.¹¹

N. 0.85. Wts. 69.6, 69.4, 68.7 grs.

13. Similar ;¹² with same ornamentation of throne and same mint-marks.

N. 0.85. Wt. 69.8 grs.

⁸ This coin considerably exceeds the prescribed weight (see below, p. 42). See also p. 47 for comment on this type.

⁹ The same marks for the *officinae* were used at Treves during the reign of Gratian as under Valens.

¹⁰ For identification of these figures on Nos. 8–15, see below, p. 48 f.

¹¹ Nos. 10 and 11 are struck from the same dies, both obverse and reverse ; the reverse of No. 12 is also from the same die, but not the obverse.

¹² Both obverse and reverse are struck from other dies than the three preceding pieces.

14-15. Similar; ¹³ with same mint-marks; ornamentation of throne, X.

N. 0·85. Wts. 69·6, 69·4 grs.

16. *Obv.*—Similar; but the portrait of Gratian is somewhat older.

Rev.—Similar; but the seated figures are those of Gratian and Theodosius I,¹⁴ both being of equal height; ornamentation of throne, X; in the exergue, TROBC (i.e. *Tertia*).

N. 0·85. Wt. 68·4 grs. [Pl. V. 8.]

17. *Obv.*—Similar; but the portrait of Gratian shows signs of increasing age, and the diadem consists of a jewel at the top of the head and a rosette at the side between four pellets, two above and two below.

Rev.—Similar; same seated figures; throne ornamented, X; in the exergue, TROBS (*Secunda*).

N. 0·9. Wt. 69·4 grs. [Pl. V. 10.]

18. Similar; with same portrait, mint-marks, &c.; back of throne ornamented, X; the globe held by the emperors is ornamented with a large star surrounded by pellets.

N. 0·85. Wt. 68·4 grs. [Pl. V. 9.]

19. Similar; with same portrait; throne ornamented, X; in the exergue, TROBC (*Tertia*).

N. 0·8. Wt. 69·0 grs.

20. Similar; with same portrait and same mint-marks; throne ornamented, X.

N. 0·8. Wt. 68·3 grs.

21.¹⁴ *Obv.*—DN GRATIAN SPFAVG Bust of Gratian r., similar to No. 16, wearing diadem composed of pearls and single jewel at top of head.

¹³ Both obverse and reverse of these two pieces vary.

^{13a} For remarks on this identification, see below, p. 50.

¹⁴ This is a contemporary barbarous copy. It belongs to the same issue as No. 16, i.e. before the form of the diadem was changed. The figures on the reverse are therefore those of Gratian and Theodosius. In the mint-mark the S has been reversed.

Rev.—Similar; but of coarse workmanship; the throne is ornamented with XXX; in the exergue, TROZ (*Secunda*).

N. 0.9. Wt. 67.3 grs. [Pl. V. 11.]

*Rome.*¹⁵

22. *Obv.*—DN GRATIA NVSPFAVG Bust of Gratian r., wearing diadem of pearls with ornament at top of head; paludamentum and cuirass; similar to No. 16.

¹⁵ The identification of this coin as being struck at Rome has been so thoroughly discussed that it would have been scarcely necessary to draw attention to it but that a new interpretation has recently been put on the letters COM. In the *Num. Chron.*, 1861, p. 176, Madden says, in an article on the *Coins of Theodosius I and II*: "After the death of Theodosius I the Empire is divided between his sons Arcadius and Honorius, and the forms COMOB for the *Western* and CONOB for the *Eastern* Empire become the adopted exergual mint-marks." Also in an article on *Roman Coins struck in Britain*, communicated to the Archaeological Institute in July, 1866 (see *Proceedings*), Count de Salis confirmed Madden's view; since he remarks "COM and COMOB belong to Rome, when not accompanied in the field of the reverse by the initials TR, LD, AR, MD, AQ, RV, or SM, &c." These marks, used in the mints of the Western Empire, have been interpreted to mean "[money] struck according to the standard of the mint of Constantinople." The inscription in full would be *Constantinopolis Moneta OBryzata*, or *Constantinopolis Moneta* only (cf. Babelon, *Trakté*, vol. i. pp. 997, 1007, 1037, 1039). Mr. Craster, in the Report of the 1908 excavations at Corstopitum (see *Arch. Ael.*, 1909, p. 353 n.), and again in his paper in the *Num. Chron.*, Vol. XII. (1912), p. 310, n. 76, however, remarks: "The mark COM, an abbreviation for *Comes Sacrarum Largitionum*, is the stamp of the chief financial minister, and does not, when unaccompanied by other marks, assist in locating the mint." Mr. Craster's interpretation is supported to a certain degree by Dr. Willers in *Num. Zeit.*, xxxi. pp. 45 ff., who, however, identifies the legend with the *Comes auri*, a sub-officer of the *Comes Sacrarum Largitionum*, whose office is referred to in *Cod. Theod.*, 9, 21, 7. This is a question which cannot be discussed in a footnote, but I am inclined to pause before accepting either Mr. Craster's or Dr. Willers' view; as it seems to me unlikely that on the coinage either of these officers would sign himself by the first three letters of his title *Comes* only, which would convey so little to the public mind; as was not the case with the legends CONOB, TESOB, &c. At all events, it is to the Roman mint that all coins with COM or COMOB only are to be assigned.

Rev.—VICTOR IAAVGG The Emperors, Gratian and Valentinian II,¹⁶ seated facing on throne, supporting globe, &c.; similar to No. 8, but both figures are nimbate; in the exergue, COM.

A. 0·85. Wt. 69·4 grs. [Pl. V. 12.]

VALENTINIAN II.

375–392 A.D.

Treves.

23. *Obv.*—DNVALENTINIANVSIVNPFVVG Youthful bust of Valentinian II r., wearing diadem composed of pearls only, paludamentum and cuirass.

Rev.—VICTOR IAAVGG The Emperors, Valens and Gratian,¹⁷ seated facing on throne and supporting on r. hands a globe; between them a palm-branch; behind the throne is seen the half-figure of Victory facing, wings spread; the back of the throne is ornamented, X; in the exergue, TROBC (*Tertia*).

A. 0·85. Wt. 68·6 grs. [Pl. VI. 1.]

- 24–26. *Obv.*—Similar; the portrait is somewhat older and a jewel is attached to the diadem at the top of the head.

Rev.—Similar; the seated figures are those of Gratian and his young brother Valentinian who is represented as a youth; on the globe is a star or cross, and the back of the throne is ornamented, X; in the exergue, TROBT (*Tertia*).

A. 0·85. Wts. 70·0, 69·6, and 69·0 grs.
[Pl. VI. 2.]

These three pieces are all struck from the same obverse and reverse dies.

¹⁶ For remarks on this identification, see below, p. 49.

¹⁷ For particulars of these figures and those on the following coins of Valentinian II, see below, p. 51.

27. Similar.

N. 0·9. Wt. 69·4 grs.

28-29. Similar.

N. 0·85. Wts. 69·0, 68·6 grs.

These two coins are also struck from the same obverse and reverse dies.

30. Similar.

• *N.* 0·9. Wt. 68·7 grs.

THEODOSIUS I.

379-395 A.D.

Treves.

31. *Obv.*—DNTHEODO SIVSPFAVG Bust of Theodosius I r., wearing diadem of pearls with jewel at top of head, paludamentum and cuirass.

Rev.—VICTOR IAAVGG The Emperors, Gratian and Theodosius I,¹⁸ seated facing on throne and supporting a globe on their r. hands, &c., similar to No. 16; the back of the throne is ornamented, X; in the exergue, TROBC (*Tertia*).

N. 0·85. Wt. 68·2 grs. [Pl. VI. 3.]

32. Similar; the globe on the reverse bears a star and the back of the throne is ornamented, X; in the exergue, TROBC (*Tertia*).

N. 0·85. Wt. 68·4 grs. [Pl. VI. 4.]

33. Similar; back of throne ornamented, X; in the exergue, TROBC (*Tertia*).

N. 0·85. Wt. 69·4 grs.

The reverse shows carelessness of execution on the part of the engravers of the die.

¹⁸ See below, p. 49 f, for the identification of these figures.

34. Similar; like the preceding this coin is also of inferior design; the figure of Victory is meagre and her wings are represented by a single feather to each; in the exergue, TROBC (*Tertia*).

N. 0.9. Wt. 69.6 grs. [Pl. VI. 5.]

Rome.

35. *Obv.*—Similar to No. 31.

Rev.—Similar to No. 31; but both Emperors are nimbate; the globe is not decorated with a star, and the back of the throne is ornamented, X; in the exergue, COM.¹⁹

N. 0.85. Wt. 70.0 grs. [Pl. VI. 6.]

MAGNUS MAXIMUS.

383–388 A.D.

Treves.

- 36–37. *Obv.*—DNMAGMA XIMVSPFAVG Bust of Magnus Maximus r., wearing diadem consisting of a rosette between four pearls, two above and two below,²⁰ and jewel at top of head, paludamentum and cuirass.

Rev.—RESTITVTOR REIPUBLICAE The Emperor, standing front, head to r., holding with r. hand the labarum and on l. a globe surmounted by Victory; he wears diadem and paludamentum which falls over l. arm in a single fold,²¹ cuirass and boots (*calcei*);

¹⁹ For remarks on this mint-mark, see above, p. 37. As on coins of Gratian struck at Rome (see No. 22), both Emperors on the reverse are nimbate.

²⁰ The diadem is composed of the same ornaments as that on the later coins of Gratian (see No. 17).

²¹ The paludamentum as it falls over the left arm of the Emperor shows a series of four varieties in form: in Nos. 36–38 it falls in a single fold; in Nos. 39–41 the fold is double the whole length from the arm; in Nos. 42–44 it ends in a long narrow loop; and in Nos. 45–47 the loop is near the bottom and is wider. These variations may not quite prove the order of the issues, but they help to divide up the

in the field on l. star; in the exergue, SMTR.

N. 0.85. Wts. 68.6, 68.0 grs.²²
[Pl. VI. 7.]

38. Similar; but the form of the diadem is varied; there being three pearls above the rosette and two below.²³

N. 0.85. Wt. 68.8 grs. [Pl. VI. 8.]

39²⁴–41. Similar; the diadem is as on Nos. 36–37, but the paludamentum on the reverse falls in two folds separate from the arm.

N. 0.85. Wts. 70.4, 69.6, 68.5 grs.
[Pl. VI. 9.]

42–44.²⁵ Similar; but the paludamentum ends in a long narrow loop.

N. 0.85. Wts. 69.5, 69.2, 68.8 grs.
[Pl. VI. 10.]

45–47. Similar; but the paludamentum ends in a shorter but somewhat wider loop.²⁶

N. 0.85. Wts. 69.0, 67.7, 69.2 grs.
[Pl. VI. 11.]

48. *Obv.*—Similar.

Rev.—VICTOR IAAVGG The emperors, Magnus Maximus and Theodosius I,²⁷ seated facing on throne and supporting a globe on their r. hands, &c., similar to No. 23; on the globe is a star and the back of the throne is ornamented, X; in the exergue, TROB.

N. 0.85. Wt. 68.0 grs. [Pl. VI. 12.]

coins into separate series, which show probably the work of different *offina*.

²² These two coins are struck from the same reverse die.

²³ This form is exceptional and does not occur on any other coin in the hoard.

²⁴ Nos. 39, 40 are struck from the same obverse and reverse dies.

²⁵ Nos. 43, 44 are also struck from the same reverse die.

²⁶ Nos. 45, 46 are also struck from the same reverse die.

²⁷ For the identification of these figures, see below, p. 54.

Before discussing the types of these solidi, which, as will have been seen, are very limited in number, we may draw attention to a few points connected with the issue of the coins.

First of all, as to the weight. In his original report of the Find Mr. Craster commented on the light weight of these coins, which he puts at an average of 64 grains or 4·20 grammes. Upon my weighing each coin carefully I found that Mr. Craster had underestimated their weight, and that in fact they practically come up to the standard established by the Edict of Constantine the Great in 312 A.D., and revived by Valentinian I in 365 A.D. By this enactment the solidus was to weigh 4·55 grammes or 70·22 grs. The coins in the hoard show an unusual amount of accuracy in this respect, as four specimens are of full weight, one, in fact, No. 7, exceeding it, being 82·2 grs. (the only piece representing the Constantinople Mint), twenty-three exceed 69 grs., nineteen 68 grs., and two only come slightly below 68 grs., or throughout an average of 69·4 grs. This speaks well for the honesty of the mints in such uncertain times. We may take this average as a fair test, as the coins throughout are practically in mint condition.

The only mints represented are those of Rome, Constantinople, and Treves, and their respective numbers are four, one, and forty-three. At first it might seem a cause for regret that so few mint-names occur, and that of two, Rome and Constantinople, there are only five pieces out of the forty-eight; but after a careful examination of the coins the preponderance of those of Treves has provided the means of throwing considerable light on the succession of the issues, not only of this particular mint, but also of the others (for what affects the one affects also

the others, as the same types practically exist at all), and also on the identification of the various personages represented on the reverses. For though the type may not be changed, yet the individuals represented vary according to the period of the issue of the coins.

Like the mints, the types are only three in number. With the exception of the single specimen of Gratian, having on the reverse the young Augustus holding spear and globe as "*Princeps Juventutis*," the reverse designs are limited to those showing the Emperor as "*Restitutor Reipublicae*," holding the labarum and Victory on a globe and two Emperors seated and guarded by an angel or Victory, and with the legend "*Victoria Augg*" (var.). Of the former there are thirteen specimens, and of the latter thirty-three. These two types appear for the first time under Valentinian I, so that in each case we possess in the hoard probably the first examples. The legend "*Principium Juventutis*," is so exceptional that the coin of Gratian is the only one on which it occurs [Pl. V. 5]. The type which accompanies it, the Emperor holding spear and globe, is not unusual, and is met with in many previous instances.

In order that we may follow more easily the order of the types and the sequence of the issues as illustrated by coins in the hoard, a brief summary of the chief events connected with the succession of the Emperors, whose coins are described, may be useful. It is not necessary to enter into a general history of the period, for at this time the types of the coins are very limited, and have lost much of their historical character.

364 A.D. Jovian dies January 17, and Valentinian, the son of Count Gratian, a native of Cibalae (Lower Pannonia), is elected his successor on the 26th of the same month. Thirty

days after his own elevation Valentinian bestows the title of Augustus on his brother Valens ; and they proceed to divide up the Roman Empire between themselves ; Valens accepting as his share the praefecture of the East from the Lower Danube to the confines of Persia ; whilst Valentinian reserves for himself the Western portion, which includes the praefecture of Illyricum, Italy, and Gaul from the extremity of Greece to the Caledonian rampart and from the rampart of Caledonia to the foot of Mount Atlas.²⁸

367 A.D. Gratian, son of Valentinian I and Severa, born 359 A.D., receives from his father the title of Augustus, and his name is added to those of Valentinian and Valens in all legal transactions of the Roman Government. His chief residence is at Treves.

375 A.D. Valentinian I dies November 17, and is succeeded in the government of the West by his elder son Gratian, who six days after his father's death confers the title of Augustus on his young brother Valentinian II, son of Valentinian I and Justina, he being only four years old. The government of the Roman world is now exercised in the united names of Valens and his two nephews. Valentinian II takes up his residence in Milan, but on account of his extreme youth does not actually participate in the government.

378 A.D. Valens, wounded at the battle of Hadrianople (Thrace), August 9, perishes by fire in a cottage near the battlefield. The Goths now hold the Eastern Empire from Macedonia to Asia.

378-9 A.D. Gratian marches to the relief of Valens, is informed of the latter's defeat, and appoints Theodosius as his colleague, and invests him with the Empire of the East, January 19, 379.

383 A.D. Magnus Maximus raises the standard of rebellion in Britain and marches into Gaul to attack Gratian, who is assassinated at Lyons, August 25. Theodosius marches to the relief of Gratian, but on receiving notice of his death enters into a treaty with Maximus, who is allotted the possession of the countries beyond the Alps. Valentinian II

²⁸ Gibbon, *Roman Empire* (Milman, ed. Smith), 1862, vol. iii. pp. 236, 237.

is confirmed and secured in the sovereignty of Italy, Africa, and Western Illyricum. Maximus confers the title of Augustus on his son Flavius Victor.

387-8 A.D. Maximus invades Italy in the month of August (387 A.D.) and compels Valentinian II and Justina, his mother, to leave the country and to take refuge in Thessalonica. Theodosius takes up arms in the cause of Valentinian, defeats Maximus on the Save (Siscia), and pursues him to Aquileia, where he is assassinated (June-August, 388 A.D.).

388-391 A.D. Theodosius remains in Italy, restores order, and reaffirms Valentinian in the provinces from which he had been driven by Maximus.

Let us now turn to the coins themselves, and see how far the types illustrate the history of the time. Being few in number, much is not to be expected. The four coins of Valentinian I supply two types (two specimens of each), and it is of interest that both had their origin in the reigns of Valentinian I and Valens. It is difficult to say which of the two types should be placed first, but I am rather of opinion that preference may well be given to that of "Restitutor Reipublicae" [Pl. V. 1].

The death of Julian had left the affairs of the Empire in a very doubtful and dangerous state, and not the least baneful element was the religious strife which pervaded all classes. The short reign of Jovian saw but little improvement; but at his accession Valentinian at once set about a reform of the administration. His first step was to associate with him in the purple his brother Valens, who, however, had little knowledge of government, never having been trained to any employment, military or civil; but he had one good quality, which was gratitude and loyalty to his brother.²⁹ We have

²⁹ Gibbon, *op. cit.*, vol. iii. p. 236.

already mentioned how the two Emperors divided amongst themselves the provinces. It is no doubt in connexion with these events that we must identify the issue of the coins which bear the legend "Restitutor Reipublicae," and which show the Emperor holding the labarum and Victory. This type is met with at all the mints, east and west, in the name of Valens as well as of Valentinian. As the revolt of Procopius began in the September of 365 A.D., these coins were probably issued at some time between that date and June of the previous year, when Valentinian and Valens carried out their division of the Roman Empire. The presence of the labarum points to the religious tolerance, which had been revived by Jovian after the death of Julian, and which had been affirmed by his two successors. Both coins in the hoard are of the Roman mint.

The other reverse type of Valentinian is that which shows the two Emperors seated facing, holding between them a globe, and with an angel or Victory behind them. This is also the only type of the coins of Valens in the hoard [Pl. V. 3, 4]. It was repeated throughout their joint reigns, and, as we shall see, it was continued by Valens after his brother's death. The general style of these coins in the hoard, all of which belong to the mint of Treves, and the portraits of the Emperors, which assume a more fixed character, point to a somewhat later issue than those of the "Restitutor Reipublicae" type.

Cohen³⁰ has identified the figures on the reverse of the coins of Valentinian as those of that Emperor and his son (Gratian); but on other pieces of the same type, on which that Emperor associates with him his son, the

³⁰ *Monn. de l'Emp. rom.*, vol. viii. p. 93, 43.

latter is represented as of smaller stature. This is also the case with the coins of Valens, in honour of his nephew. As the figures on the coins of Valentinian and Valens in the hoard are of equal size and stature, they appear to represent those Emperors only.

We may now pass on to the coins of Gratian. Here again we have only two main types. As we have already seen, it was in 367 A.D. that Gratian, at the age of eight years, received the title of Augustus, and was associated with his father, Valentinian I, and his uncle, Valens, in all legal transactions. In 375 A.D., on the death of his father, he succeeded to the government of the West, and conferred the title of Augustus on his young brother, Valentinian II, then only four years old. As in his own case some years previously this title did not at first carry with it any administrative power, so that in the January of 379 A.D., on the death of Valens, he chose as his colleague in the Empire the successful and warlike general, Theodosius, who had distinguished himself in Britain and Africa, and more recently in the campaign against the Sarmatians. To Theodosius was assigned the Eastern portion of the Empire.

The earlier of the two types of Gratian's coins in the hoard is that which shows his youthful bust on the obverse, and on the reverse his full-length figure, head nimbate, standing and holding a spear and a globe, with the legend *PRINCIPIVM IVVENTVTIS* [Pl. V. 5]. This type is frequently met with throughout the Roman imperial series, but the legend occurs on this issue only; and so far as I am aware it was limited to the mints of Constantinople, Treves, and Nicomedia. The nearest approach to this legend occurs on solidi of Crispus, which show him in the same attitude, but without the nimbus, and on which

the legend is PRINCIPIA IVVENTVTIS. On this one Eckhel³¹ remarks, "I shall not seem, perhaps, to go wide of the mark, if I suppose it to be understood of the first years of the early manhood (*principia juventutis*) of Crispus spent in camp, as illustrated by the military figure on the reverse." The application of this epigraph to Crispus was more appropriate than to Gratian, who, at the time that this coin was struck, had probably not reached his tenth year, as shown by the very youthful portrait on the obverse. It is much younger than that connected with any other type of this reign.

The second type is but a repetition of that issued by Valentinian and Valens, *i.e.* the two seated figures holding a globe and accompanied by Victory, &c. Of this type there were fifteen examples in the hoard, and fourteen of these (if we include the barbarous piece, No. 21) bear the initials of the Treves mint. It may have been at first sight a cause for regret that only the mints of Treves and Rome are included, but the large number of pieces of the former place enable us to establish the sequence of the issues during the reign of Gratian. Had these coins been more evenly distributed over the various Roman mints this result could not have been obtained.

In his description of the coins of Gratian of this type and with the legend VICTORIA AVGG (var.), Cohen³² identifies the two figures on the reverse as of Gratian and Valentinian the younger. Though they vary in size he does not make any distinction. If, however, throughout we take this reverse type in conjunction with that on the obverse, we appear to have a record of the succession

³¹ *Doct. Num. Vet.*, viii. p. 101.

³² *Op. cit.*, vol. viii. p. 130, 38.

of the Augusti at this time. On No. 8 [Pl. V. 6] the figures on the reverse are equal in stature, and as the obverse portrait is youthful I have no hesitation in identifying them as of Valentinian and Valens. This coin would therefore have been struck at some time between 367-375 A.D. The occurrence of only one specimen in the hoard must be considered as merely fortuitous, as also the absence of the other types of this reign, for it is by no means rare. In the National Collection there are already three specimens struck at Treves, which proportionately is quite the average of those of other types.

On the reverses of Nos. 9-15 [Pl. V. 7] we have certainly other figures represented. One of them is intended to represent a man of fairly mature age; the other quite a youth, as it is much smaller in size. These figures I would identify as of Gratian and his young brother, Valentinian, whom he raised to the purple soon after his accession. The disparity in the size of the figures must have been intentional and for a distinct purpose, and so this identification seems to receive all the confirmation that is necessary; especially as, so far as I have been able to ascertain, it occurs only on the money of the Western mints. It is quite easy also to trace a difference in the age of Gratian from the portraits on the obverse, though he wears a diadem consisting of an ornament on the top with two rows of pearls at the sides. A little later we shall notice a change in this respect.

This coinage appears to have lasted from 375-379 A.D., when, on the association of Theodosius in the government of the Empire, another change takes place, and we again have on the reverse two seated figures equal in size

and height (see Nos. 16-22, Pl. V. 8-11). These I would identify as of Gratian and Theodosius, and this identification is borne out by the obverse type, where we have an older portrait than on the coins with the seated Gratian and Valentinian II, and the diadem which encircles the Emperor's head is of a more regal character. It consists of a large ornament at the top of the head, and at the side a rosette between four pearls, two above and two below. To these there are two exceptions (Nos. 16 and 22), on which are the same figures, but the head on the obverse wears the simpler diadem; the portrait, however, is older than that on the first issue of this type under Gratian. These two coins, one struck at Treves, the other at Rome, are the connecting link between the two issues.

The coinage of Gratian, as illustrated by this find, clearly indicates four series, which can be arranged in the following chronological order: (1) Where he is represented on the reverse alone as *Princeps Juventutis*; (2) where he is shown with his father and uncle, Valentinian I and Valens; (3) where he occurs with his young brother, Valentinian II; and (4) with his colleague Theodosius. There are other types of this reign which may be classed to various dates as referring to special events, but with these we do not propose to deal at present. It seems, however, that the one with the seated figures was continuous from 367-383 A.D.; that is, from the time of Gratian receiving the title of Augustus until his death.

The eight coins of Valentinian II in the hoard, though all of one type—two seated figures and Victory—also supply some dates for the classification of his money, though perhaps in a somewhat less degree than those of

Gratian. They are all of the Treves mint, and on all he is styled D. N. VALENTINIANVS IVN. P. F. AVG., which shows that they were struck early in his reign, and probably before his brother's death. He appears to have retained the title "Junior" to distinguish him from his father until *circa* 383 A.D., the date of the usurpation of Maximus, for on his coins struck at Rome with the reverse type of Roma seated holding spear and globe, &c., and the legend CONCORDIA AVGGG, which no doubt records the peace with Maximus in 383 A.D., he is styled D. N. VALENTINIANVS IVN. P. F. AVG or D. N. VALENTINIANVS P. F. AVG. The title "Junior" must have been dropped at this time. This is confirmed by his still later coins: those struck after the death of Maximus, when he and Theodosius alone represented the sovereignty of the Empire. This dating of the coins from the obverse legend is borne out by a variation in the type of the reverse. No. 23 [Pl. VI. 1], which certainly presents us with the youngest portrait of Valentinian, shows on the reverse two seated figures of the same height. These can only be of his brother Gratian and his uncle Valens, and it must have been issued certainly not later than 378 A.D. The other coins in the hoard, on which the portrait is certainly older and the bust larger, have the usual figures on the reverse, but one is much smaller than the other. These may be identified as of Valentinian himself and his elder brother Gratian. These coins were, therefore, issued between 378–383 A.D.; not necessarily over the whole period, since at that time Valentinian took no active part in the government, the administration of his portion of the Empire being in charge of his brother. From these details we may safely conclude that there were no coins of Valentinian in the hoard which were

issued after 383 A.D. In each case Cohen ³³ has identified the figures as of Gratian and Valentinian II. All the coins of Valentinian II in the hoard, as already mentioned, are of the Treves mint.

If we assume, therefore, that none of the preceding coins could have been struck after 383 A.D., the figures on the reverses of those of Theodosius must be of himself and Gratian and would be contemporaneous with the last coinage of the latter. These coins belong to the early years of his reign. His later issues of solidi with the reverse legend CONCORDIA AVGGG (Roma or Constantinopolis seated) or VICTORIA AVGGG (Emperor holding labarum and Victory) have an older portrait; and besides that some of them show innovations, such as the occurrence of the initials of the mints in the field, which also suggest a later date. The CONCORDIA AVGGG type was probably introduced when Theodosius accepted Magnus Maximus as an associate in the Empire, and when Maximus boldly offered him the choice of peace or war.³⁴ This type may have been in use till nearly the death of Valentinian II, for with it we have three distinct busts of Theodosius: one wearing a diadem consisting of pearls only; a second, with a diadem of pearls and jewel-ornaments alternately; and a third with the helmeted bust facing, holding spear and shield, which is the first occurrence of this form of the imperial portrait. This new type was not much used in the West, but in the East, especially with the early Byzantine Emperors, Anastasius-Justinian, it found a good deal of favour. Also, though it may not be of much account, the legends sometimes end AVGGGG, *i.e.* with four G's; from

³³ *Monn de l'Emp. rom.*, vol. viii. p. 143, 36.

³⁴ Gibbon, *op cit.*, vol. iii. p. 361.

which it may be interpreted that Theodosius included his infant son Arcadius, who was declared Augustus in 383 A.D., at the time of the death of Gratian.

When Gratian had reached his twentieth year, 379 A.D., his fame was equal to that of the most celebrated princes. His recent victory over the Alamanni at Colmar, which secured the peace of Gaul and delivered the West from a formidable invasion, was one of the greatest military successes of the age, and earned for him the esteem and devotion of his army. On his return to Gaul, and when he had settled down in Paris, he changed his mode of life and abandoned the camp for the chase. This neglect of his duties as an Emperor was the cause of great discontent amongst his soldiery, so that when Magnus Maximus raised the standard of revolt in Britain, the latter took advantage of this unrest and invaded Gaul, where he was joyfully received by a large portion of Gratian's army. The Emperor of the West fled towards Lugdunum, where he was assassinated, August 25, 383 A.D. As it was impossible for Theodosius to come to the relief of Gratian, who had always been his benefactor, he was obliged to consent to an arrangement with Maximus under which, as we have seen, he assigned to him the portion of the Empire which lay beyond the Alps, reserving for Valentinian II the sovereignty of Italy, Africa, and the Western Illyricum, and retaining for himself the East.³⁵ In these circumstances it is not surprising that Maximus selected for the reverse type of the first issue of his coinage that showing himself holding the labarum and Victory with the legend RESTITVTOR REIPVBLICAE [Pl. VI. 7], one which had

³⁵ Gibbon, *op. cit.*, vol. iii. p. 356 ff.

under somewhat similar circumstances been adopted by his predecessors, Valentinian I, Valens, and Gratian. Of the thirteen coins of Maximus in the hoard twelve are of this type: the other specimen is of the usual VICTORIA AVGG type, showing the two Emperors, Maximus and Theodosius, seated. The RESTITVTOR REIPVBLICAE pieces vary but very slightly, and only in the folds of the drapery of the obverse and the jewel which attaches it on the shoulder, and in the long mantle on the reverse which falls in a single or a double fold from his shoulders. They are also apparently from the same *officinae* at Treves. Though some of the coins of Maximus may be assigned from their fabric to Gaul, yet his only other certain mint is that of London, which then received the name of "Augusta." The figures on the reverse of the VICTORIA AVGG type [Pl. VI. 12] I have identified as Maximus and Theodosius, but Cohen³⁶ says "Maximus and Victor." In this case I would use the same argument as in that of Gratian. The coins of this type of Flavius Victor, who was proclaimed Augustus by his father soon after the peace with Theodosius, have the figures of different sizes, the son being represented much smaller in stature. They were no doubt struck by order of Maximus, and if he had intended to represent the son on his own coins he would certainly have adopted the same design; but so far as I am aware there are none at present known; at least none are in the National Collection nor have I come across any in recent sales. It is possible that that type is a little later in date than the "Restitutor Reipublicae" one, yet not much, since a specimen was in the hoard. The

³⁶ *Monn. de l'Emp. rom.*, vol. viii.

legend AVGG would rather lead us to infer that Maximus only wished to acknowledge Theodosius as his colleague, and that at first he was disposed to treat Valentinian II as of little or no account. In his only other type of the solidus, that of Roma seated and the legend CONCORDIA AVGGG, Maximus appears to have included Valentinian also; unless the third G refers to Flavius Victor, which I would very much question.

Mr. Craster in his notes on this hoard has placed its burial at some time between 385-7 A.D. I am, however, disposed to assign it to a slightly earlier date, 384-5 A.D., on account of the absence of the later gold types of Theodosius and because there were no coins of Valentinian II without the title "Junior," which, as we have shown above (p. 51), he must have abandoned soon after the association of Maximus.

There seems to be no difficulty in accounting for the large number of coins of Maximus in the hoard; for no doubt so soon as he had come to terms with Theodosius he sent back his troops, which he had withdrawn from Britain in order that they might protect the northern districts against the attacks of the marauders of the North. Before their departure these troops would have been well rewarded for their faithful service, the reward consisting of money, and much of it in gold, as being more easily portable.

In his description of the Second Corbridge Find, which was much larger, Mr. Craster has suggested that it consisted of the property of several owners in succession. This view cannot well be applied to the first find, for it is clearly the hoardings of a single individual which he amassed gradually during a period of about twenty years. He was, however, of a fastidious turn of mind as he only

set aside such pieces as were in fine condition. This seems the only explanation of the fact that all the coins from the earliest to the latest are in mint condition, showing absolutely no signs of wear. This would certainly not have been the case if all the coins had been collected at one time, *i.e.* in 384 or 385 A.D.

H. A. GRUEBER.

III.

TWO HOARDS OF EDWARD PENNIES RECENTLY FOUND IN SCOTLAND.

(Plates VII., VIII., IX.)

IN the course of the year 1911 two comparatively large hoards of silver coins, consisting for the most part of pennies of the Edwards, came to light in different parts of Scotland. Both hoards passed through my hands, and in view of the possibility that their contents might throw some light on vexed questions of chronological arrangement, I endeavoured to examine them as thoroughly as the time at my disposal permitted. My notes would have been fuller and more informing, at all events as regards the earlier issues, had the second instalment of Messrs. Fox's very important and valuable *Numismatic History of the Reigns of Edward I, II, and III*¹ been available for guidance while I had the first of the two finds under observation. Unfortunately it was not then in type. The authors most kindly sent it me in proof when I was working at the second find, so that I was able to profit to some extent by the wealth of illuminating material it contains. If I had been in a position to consult it sooner, I should probably have adopted the system of classification it lays down, for I doubt whether a nearer approach to finality is ever likely

¹ See vol. vii. of the *British Numismatic Journal*.

to be attained. Before the proof reached me, however, my own basis of arrangement was already settled, and the first hoard had passed beyond my ken. In all the circumstances it seemed better to adhere to the lines originally mapped out. In so far, therefore, as my results tally with those of Messrs. Fox—and it will be seen that they differ from them mainly in being less detailed—they may be serviceable in the way of confirmation.² It should be added that my arrangement owes much to the pioneer work of Edward Burns. Although his classification is less complete and less exhaustive than he himself believed it to be, it unquestionably contains the root of the matter on all essential points. The more closely one studies the few pages he devoted to the subject in his *Coinage of Scotland*,³ the more warmly does one come to admire his powers of accurate observation and his wonderful acumen. If only his exposition had been less hard to follow, his merits would certainly have obtained much wider recognition. It will be convenient to begin with a general account of each of the two hoards.

The first was turned up by the plough on April 11, 1911, on the farm of Blackhills in the parish of Parton, Kirkcudbrightshire. According to information kindly furnished me by Mr. John Whitby, the tenant, it appears that the discovery was made at a spot about 400 yards from the river Urr, and about 700 yards from the site of Corsock Tower. Here, between two oblong arable

² Messrs. Fox were also good enough to give me their opinion regarding the precise place of some difficult pieces, of which I was able to send them casts. In all cases their verdict agreed with my own, 'so far as initial differences of arrangement permitted.

³ Vol. i. pp. 186 ff.

hills, there is a stretch of meadow ground, the soil of which is a sort of black moss or loam—not peat—containing much rotted hazel scrub. Its condition to-day suggests that it may at one time have been a swampy bog. In ordinary seasons it is very soft in wet weather; a pole can be pushed six feet down and pulled out again without difficulty. So far as Mr. Whitby is aware, no attempt had ever been made to plough it before. But in 1911 the abnormally dry spring seemed to offer a good opportunity for getting it levelled, so that the hay might be more easily cut.

The coins had been concealed in a wooden bowl or 'brose-cap,' which lay only some six inches below the surface, and which was consequently broken into fragments when it was struck by the coulter. There is reason to believe that through the efforts of Mr. Whitby and his ploughman, Charles Clark, reinforced by the zeal of subsequent searchers, practically the entire contents of the vessel were recovered. The total number of pieces handed over to the Crown authorities, and passed on by the Exchequer to the National Museum in Edinburgh for report, was 2067. The detailed analysis which I propose to give presently, will show that the hoard must have been deposited about 1320 A.D. The following summary will make its general character clear:—

SCOTTISH SINGLE-LONG-CROSS PENNIES.

Alexander III	.	.	.	.	.	.	29 ⁴
John Balliol	.	.	.	.	.	.	8
Robert Bruce	.	.	.	.	.	.	6

⁴ Including a curious remnant of a plated coin, for which see *infra*, p. 113.

PENNIES OF EDWARD I AND II.

(a) English.

London	1020
Canterbury	494
Durham (Ecclesiastical)	175
Durham (Ordinary)	49
Berwick	69
Bury St. Edmunds (Robert de Hadelic)	4
Bury St. Edmunds (Ordinary)	49
Bristol	44
York (Ecclesiastical)	6
York (Ordinary)	36
Newcastle	18
Lincoln	9
Hull	7
Chester	3
Exeter	2

(b) Irish.

Dublin	19
Waterford	9

FOREIGN STERLINGS.

Various mints	12
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HALFPENNY OF EDWARD I.

Berwick	1
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FARTHING OF EDWARD I OR II.

London	1
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The second hoard came from near Kelso in Roxburgh-

shire, the precise locality of the discovery being the farm of Mellendean, which lies on the south of the Tweed, close to the junction of the North British and North Eastern Railway lines. One day in the latter half of October, 1911, a lad named John Aikman was engaged ploughing the field known as the Horse Field when he noticed several coins that appeared to be lying loose in the soil. Thinking there might be more, he procured a spade and made a thorough search, with the result that he discovered a large number about two feet below the surface. On the following morning he renewed his search and found several others. During the next few days, after rain had washed the furrows, a good many additional specimens were picked up by different persons who had heard of Aikman's good fortune and came to try their own luck. As no trace of any vessel was observable, it may be supposed that the treasure had originally been contained in a bag made of cloth or of some other material which had rotted away entirely. The field had been in grass for a long time, and the ploughing was rather deeper than usual. The coins which passed into the hands of the Crown authorities, and which were subsequently forwarded to the National Museum for a report, numbered 532 in all. These, however, as I learned incidentally, represented only a portion of the hoard. And at a later date, thanks mainly to the zeal and tact of Mr. J. Avery, stationmaster at Sprouston, who took an immense amount of personal trouble in the matter, I was afforded an opportunity of examining as many as 364 others, collected from fourteen different persons. Mr. Avery believes that the 896 pieces which I saw constituted virtually the whole find. Internal evidence pointed plainly to *circa* 1296 A.D. as the probable date

of burial. The following is a summary of the contents:—

SCOTTISH SINGLE-LONG-CROSS PENNIES.

Alexander III	63
John Balliol	2

PENNIES OF EDWARD I.

(a) *English.*

London	381
Canterbury	147
Durham (Ecclesiastical)	6
Durham (Ordinary)	29
York (Ecclesiastical)	4
York (Ordinary)	41
Bristol	65
Bury St. Edmunds (Robert de Hadelie)	8
Lincoln	15
Newcastle	5
Chester	3

(b) *Irish.*

Dublin	8
Waterford	10

FOREIGN STERLINGS.

Various Mints	108
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It will be noted that, as is usual in Scottish hoards of the period, Scottish coins formed in both cases a relatively small part of the whole. At Mellendean they numbered 65 out of 896, a percentage considerably above the average; at Blackhills, 43 out of 2067, a figure somewhat below the normal. Attention may also be directed to the large representation of foreign sterlings

at Mellendean—108 out of 896, or slightly over 12 per cent. At Blackhills the corresponding proportion was only about $\frac{1}{2}$ per cent. In giving a detailed analysis of the two finds, space will be saved and comparison facilitated by treating them together, 'B.' being used to indicate Blackhills and 'M.' as an abbreviation for Mellendean. As already mentioned, the groups under which I propose to classify the coins were decided upon before Messrs. Fox's paper was in type. In some respects I could not but feel them to be tentative and unsatisfactory, but on the whole they appeared to fit, in at least a rough-and-ready way, the facts that had to be dealt with.

They were based mainly on the variations in the shape of particular letters in the inscription, and they took much less account than Burns had done of differences in the bust that constitutes the obverse type. The latter test, though occasionally very useful, is often apt to prove elusive and fanciful, a defect that cannot be regarded as at all surprising, in view of what we now know regarding the processes of die-making in the twelfth century.⁵ In discussing the various groups I shall, of course, endeavour to take advantage of the results of Messrs. Fox's most fruitful researches, so far as these have yet been made public.

GROUP I.

LONDON.

Variety a.

	M.	B.
Obv.—EDWREXANGL'DNSHYB }		
Rev.—CIVI TAS LON DON }	5	2

⁵ See particularly the paper by Mr. Shirley Fox in vol. vi. of the *British Numismatic Journal*.

Variety β .	M.	B.
<i>Obv.</i> —EDWREXANGL'DNShYB } . . .	2	5
<i>Rev.</i> —CIVI TAS LON DON }		

Variety γ .		
<i>Obv.</i> —EDWREXANGL'DNS'hYB } . . .	1	2
<i>Rev.</i> —CIVI TAS LON DON }		

Variety δ .		
<i>Obv.</i> —EDWREXANGL'DNShYB } . . .	1	1
<i>Rev.</i> —CIVI TAS LON DON }		

[Pl. VIII. 1.]

Mules.

<i>Obv.</i> —As α }		
<i>Rev.</i> —As β }	1	2
<i>Obv.</i> —As β }		
<i>Rev.</i> —As α }		3

Abnormal and Blundered Varieties.

<i>Obv.</i> —EDWREXANGL'DNShYB }	1
<i>Rev.</i> —CIVI TAS LON DON }	
<i>Obv.</i> —EDWREXANGL'DNShYB }	1
<i>Rev.</i> —CIVI TAS LON DON }	
<i>Obv.</i> —EDWREXEXANDNShYB }	1
<i>Rev.</i> —CIVI TAS LON DON }	

I had occasion to discuss this interesting group of pieces in the pages of the *Chronicle* some years ago, in connexion with the Lochmaben Hoard.⁶ The opinion there expressed as to their early date is absolutely confirmed now by the evidence from Mellendean. Burns had already recognized them as representing the first

⁶ *Num. Chron.*, 1905, pp. 63 ff. In writing that paper I quite inexcusably and unaccountably omitted to consult Burns.

issue of the new coinage of Edward I, and in this view Messrs. Fox concur, adducing documentary and other evidence to prove that they were minted in 1279. It is perhaps worth remarking that the details of the obverse type vary much more than Burns was prepared to allow. It is not, for instance, the rule for the crown to have "round pellets on the spaces between the lis." There were only two of the twenty-eight specimens recorded above of which this could be definitely asserted. Usually there was an arrow-point in the space to the left and a pellet in the space to the right.

It will be convenient to mention the little set of pieces which were represented by the coin at Blackhills, but which I do not remember to have seen noticed elsewhere. They were as follows:—

Variety *α*.

	M.	B.
<i>Obv.</i> —EDWREANGL'DNSHYB }	3	2
<i>Rev.</i> —CIVI TAS LON DON }		

[Pl. VIII. 2.]

Abnormal and Blundered Varieties.

<i>Obv.</i> —EDWREANGL'DNSHYB }	2
<i>Rev.</i> —CIVI TAS LON DON }	
<i>Obv.</i> —EDWREANGNDISHYB ⁷ }	3
<i>Rev.</i> —CIVI TAS LVN DON }	

While the length of the inscription links these coins with Group I., the style of the lettering rather associates them with the groups that follow. The bust approximates to Burns A9 or occasionally to A5. The lys at

⁷ The three examples show varieties of blundering in the obverse legend.

the sides of the crown are trifoliate, and the ornaments between them are arrow-points. On the first of the two abnormal varieties the $\bar{A}$ is very oddly formed, a circumstance which points—like the blundered legends on the second—to the probability of their being imitations. The probability becomes a certainty when one has regard to the weights. All seemed light. Those I weighed turned the scale at 17·4, 17·2, 16·6, 16, and 14·8 grains respectively. The whole set thus appears to belong to a homogeneous and fairly extensive group of forgeries, struck probably in or about 1280.

GROUP II.

LONDON.

	M.	B.
<i>Obv.</i> —EDWR' ANGL' DN SHYB }		
<i>Rev.</i> —CIVI TAS LON DON }	16	12

[Pl. VII. 1.]

The bust of the King on this group approximates sometimes to Burns A3 and sometimes to A4, while occasionally it does not agree with any of the representations illustrated by him at all. The crown has always two arrow-points in the spaces between the lys, never two pellets. A peculiar feature of the lettering is a slight notch which is almost invariably found in the tail of the R. One of the Mellendean coins had DEW on the obverse. Messrs. Fox are doubtless right in regarding Group II. as part of the issue of 1279.

GROUP III.

The following miscellaneous pieces, which all exhibit a certain amount of variation in the form of N, bear a general resemblance to one another and to the coins in

Group II., of which they should perhaps be regarded as abnormal varieties. The busts resemble Burns A3 or A4, but the ornaments on the crown are sometimes pellets, sometimes an arrow-point and a pellet, rarely two arrow-points.

LONDON.

		M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB}	. . .		1
<i>Rev.</i> —CIVI TAS LON DON }			

[Pl. VIII. 3.]

<i>Obv.</i> —EDWR'ANGL'DNSHYB}	. . .		1
<i>Rev.</i> —CIVI TAS LON DON }			

<i>Obv.</i> —EDWR'ANGL'DNSHYB}	. . .	2	1
<i>Rev.</i> —CIVI TAS LON DON }			

<i>Obv.</i> —EDWR'ANGL'DNSHYB}	. . .	1	
<i>Rev.</i> —CIVI TAS LON DON }			

[Pl. VII. 2.]

<i>Obv.</i> —EDWR'ANGL'DNSHYB}	. . .	1	
<i>Rev.</i> —CIVI TAS LON DON }			

<i>Obv.</i> —EDWR'ANGL'DNSHYB}	. . .	1	
<i>Rev.</i> —CIVI TAS LOII DOII }			

<i>Obv.</i> —EDWR'ANGL'DNSHYB}	. . .	1	
<i>Rev.</i> —CIVI TAS LOII DOII }			

[Pl. VII. 3.]

GROUP IV.

LONDON.

		M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB}	. . .	13	19
<i>Rev.</i> —CIVI TAS LON DON }			

[Pl. VIII. 4.]

CANTERBURY.

	M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB }		
<i>Rev.</i> —CIVI TĀS CAIN TOR }	2	1

One of the two Mellendean pieces has CAIN TVR.

YORK.

	M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB }		
<i>Rev.</i> —CIVI TĀS EBO RĀCI }	6	6

BRISTOL.

	M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB }		
<i>Rev.</i> —VILL ABR ISTO LLIE }	16	6

DURHAM.

	M.
<i>Obv.</i> —EDWR'ANGL'DNSHYB }	
<i>Rev.</i> —CIVI TĀS DVR EME }	3

This is Burns A5. The type is easily recognized by the characteristic feature of a specially long neck, which gives the King the appearance of wearing a high collar. The chief change in the lettering is in the R, the part above the notch having grown larger and the part below it smaller, while the latter is often brought down to touch the circle of dots beneath. Burns rightly identified Group IV. with the issue referred to in an indenture of December, 1279. Messrs. Fox show that the actual date of the series is January, 1280.

GROUP V.

LONDON.

	M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB }		
<i>Rev.</i> —CIVI TĀS LON DON }	3	2

[PL. VIII. 5.]

This is Burns A6. The type cannot be mistaken, marked as it is by having the drapery arranged round the King's neck in the form of a continuous elliptical band. The crown has two pellets for ornaments. Messrs. Fox date the issue *circa* July, 1280.

MULES with Group V.

LONDON.

	M.	B.
<i>Obv.</i> —As Group V. }	3	
<i>Rev.</i> —As Group IV. }		
<i>Obv.</i> —As Group II. }		1
<i>Rev.</i> —As Group V. }		
<i>Obv.</i> —As Group IV. }		1
<i>Rev.</i> —As Group V. }		

GROUP VI.

LONDON.

Variety <i>a</i> .	M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSH YB }	2	5
<i>Rev.</i> —CIVI TAS LON DON }		

Variety *β*.

<i>Obv.</i> —EDWR'ANGL'DNSH YB }		2
<i>Rev.</i> —CIVI TAS LON DON }		

[Pl. VIII. 6.]

YORK.

	M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSH YB }	7	3
<i>Rev.</i> —CIVI TAS EBO RACI }		

[Pl. VII. 4.]

BRISTOL.

		B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB}		
<i>Rev.</i> —VILL ABR ISTO LLIE}		2

DURHAM.

		M.
<i>Obv.</i> —EDWR'ANGL'DNSHYB}		
<i>Rev.</i> —CIVI TAS DVR EME }		1

Variety α of the London coins and at least six out of the ten from York approximate to Burns A7, while two of the remaining York pieces have more resemblance to A9. Variety β of London is identical with Burns A8. The closed α , formed as it is of three pieces, should be specially noticed; one of the two examples—that here illustrated [Pl. VIII. 6]—shows the transverse stroke doubled. The solitary Durham coin is likewise reminiscent of A8, but I failed to find on Burns's Plate A any close analogy to the Bristol pennies. The common element that binds the whole together is the drapery round the King's neck. Although it has no longer the elliptical shape so characteristic of Group V., it still presents the appearance of a continuous band. The ornaments between the lys at the sides of the crown are usually pellets, but this was not in all instances quite certain. The lettering is very much as on the immediately preceding groups. But N is always regular, and there is a slight tendency—already observable in Group V.—towards change, particularly in R and ϵ , where the wedges used in the stamping of the die are shorter, while the apostrophes are indicated by crescents. The group plainly belongs to the "enormous output" which (as Messrs. Fox have pointed out) "was needed to replace the long cross coinage, which was finally demonetised in August, 1280."

MULES with Group VI.

LONDON.

	M.	B.
<i>Obv.</i> —As Group II. }		1
<i>Rev.</i> —As Group VI. }		
<i>Obv.</i> —As Group IV. }		1
<i>Rev.</i> —As Group VI. }		
<i>Obv.</i> —As Group VI. }	3	
<i>Rev.</i> —As Group IV. }		

GROUP VII.

LONDON.

	M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB }	63	43
<i>Rev.</i> —CIVI TĀS LON DON }		

[Pl. VII. 5 and Pl. VIII. 7.]

CANTERBURY.

	M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB }	20	9
<i>Rev.</i> —CIVI TĀS CĀN TOR }		

[Pl. VIII. 8.]

BRISTOL.

	M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB }	18	17
<i>Rev.</i> —VILL ĀBR ISTO LLIE }		

YORK.

	M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB }	11	6
<i>Rev.</i> —CIVI TĀS EBO RACI }		

[Pl. VII. 6.]

^s On one of these the second N of the obverse has the form N.

LINCOLN.

	M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB }	9	2
<i>Rev.</i> —CIVI TĀS LIN COL' }		
[Pl. VII. 7.]		

DURHAM.

	M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB }	2	1
<i>Rev.</i> —CIVI TĀS DVR EIIE }		

ROBERT DE HADELIE (Bury St. Edmunds).

	M.
<i>Obv.</i> —EDWR'ANGL'DNSHYB }	1
<i>Rev.</i> —ROBE RTDE hĀDE LEIE }	

Speaking generally, one may say that the coins in this group correspond either to Burns A11 and 12, or to A14 and 15. They form part of the same "enormous output" as Group VI., and were probably struck in the latter half of 1280. The distinguishing characteristic of the obverse type is an angular dip in the upper line of the drapery, suggesting that it is divided. As a rule, the ornaments on the crown are arrow-points, but in one or two exceptional cases [*e.g.* Pl. VII. 6] pellets were noted. The letter S has a singularly 'wasp-waisted' form, having evidently been stamped on the dies with two small crescents and two short triangular wedges, thus—S. There is a good deal of variation in some of the other letters, more particularly R, the tail of which is frequently long. A is narrow, with the cross-line rather low down, and € tends to become more open owing to the relatively small size of the triangular wedges used in stamping it. The apostrophes are often crescentic.

MULES with Group VII.

LONDON.

						B.
<i>Obv.</i> —As Group VII.	}					
<i>Rev.</i> —As Group II.	}	.	.	.	.	4

The lettering of the obverse here is as on Group VII. The bust, however, does not show the same correspondence. In two cases it is strikingly like Burns A4.

GROUP VIII.

YORK (Ordinary Mint).

			M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB}				
<i>Rev.</i> —CIVI TAS EBO RACI }	.	.	17	8

In two cases N presents the peculiarity of having a pellet in the centre of the transverse stroke—N.

NEWCASTLE.

			M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB}				
<i>Rev.</i> —VILL ANO VICA STRI }	.	.	5	5

In two cases N on the obverse has a dot or pellet in the centre of the transverse stroke, the reverse being as usual.

YORK (Archiepiscopal Mint).

Variety *a* (quatrefoil on King's breast, and also in centre of reverse).

			M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB}				
<i>Rev.</i> —CIVI TAS EBO RACI }	.	.	1	2

Variety β (quatrefoil in centre of reverse only).

	M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB }		
<i>Rev.</i> —CIVI TAS EBO RACI }	3	3

[Pl. VII. 8.]

One of the coins of Variety β has a dot or pellet in the centre of the transverse stroke of N.

	M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB }		
<i>Rev.</i> —CIVI TAS DVR EME }	9	3

Three of these pieces have a dot or pellet in the centre of the transverse stroke of N.

This group, which corresponds exactly to Burns A13, is very closely related to Group VII. There are, however, some peculiar features in the lettering, the most distinctive being the long, upturned foot of L, thus—ll. Messrs. Fox have shown convincingly that the date of issue was the latter half of 1280. They explain the dot or pellet, occasionally found on the transverse stroke of the N, as a private mark of the master-moneyer, Peter de Turnemire.

GROUP IX.

LONDON.

	M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB }		
<i>Rev.</i> —CIVI TAS LON DON }	25	18

[Pl. VIII. 9.]

CANTERBURY.

	M.
<i>Obv.</i> —EDWR'ANGL'DNSHYB }	
<i>Rev.</i> —CIVI TAS CAN TOR }	4

[Pl. VII. 9.]

BRISTOL.

	M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB }		
<i>Rev.</i> —VILL ABR ISTO LLIE }	24	2

LINCOLN.

	M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB }		
<i>Rev.</i> —CIVI TAS LIN COL' }	4	5

[Pl. VII. 10.]

CHESTER.

	M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB }		
<i>Rev.</i> —CIVI TAS CES TRIE }	3	3

[Pl. VII. 11.]

ROBERT DE HADELIE (Bury St. Edmunds).

	M.
<i>Obv.</i> —EDWR'ANGL'DNSHYB }	
<i>Rev.</i> —ROBE RTDE HADE LEIE }	5

DURHAM.

	M.
<i>Obv.</i> —EDWR'ANGL'DNSHYB }	
<i>Rev.</i> —CIVI TAS DVR EME ⁹ }	1

The coins in Group IX. have been brought together because (to judge from the lettering) they appear to form a link between Group VIII. and Group X. The characteristic is a transitional form of s—neither 'wasp-waisted' nor 'full-bodied'—which occurs sometimes on the obverse, sometimes on the reverse, sometimes on both. The remaining s's approximate to the 'wasp-waisted' or to the 'full-bodied' variety, but there are very few, if any, clear instances of either. The bust on

⁹ The exact form of the M here was uncertain.

the obverse is either Burns A16 or A17. The latter usually predominates, but all the Chester coins are A16. These are the earliest pennies struck at Chester, and this serves to date the group, for Messrs. Fox show that the Chester mint was opened early in 1281.

MULES involving Group IX.

LONDON.

		M.
<i>Obv.</i> —As Group VII. }		2
<i>Rev.</i> —As Group IX. }		
<i>Obv.</i> —As Group IX. }		1
<i>Rev.</i> —As Group VII. }		

CANTERBURY.

		M.
<i>Obv.</i> —As Group IX. }		1
<i>Rev.</i> —As Group VII. }		

LINCOLN.

		M.
<i>Obv.</i> —As Group VII. }		1
<i>Rev.</i> —As Group IX. }		

GROUP X.

LONDON.

		M.	B.
<i>Obv.</i> —EDWR' ANGL' DNSHYB }		103	70
<i>Rev.</i> —CIVI TAS LON DON }			

[Pl. VII. 12.]

In one case the bar of the $\mathfrak{A}$ is omitted both on obverse and on reverse.

CANTERBURY.

	M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB }		
<i>Rev.</i> —CIVI TAS CAN TOR }	56	31

[Pl. VII. 13.]

In one case the bar of the A is omitted on the reverse ; in another it is omitted both on obverse and on reverse.

BRISTOL.

	M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB }		
<i>Rev.</i> —VILL ABR ISTO LLIE }	7	6

[Pl. VIII. 10.]

LINCOLN.

	M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB }		
<i>Rev.</i> —CIVI TAS LIN COL' }	2	1

ROBERT DE HADELIE (Bury St. Edmunds).

	M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB }		
<i>Rev.</i> —ROBE RTDE hADE LEIE }	1	2

The R here has its tail formed of a simple and rather short wedge. On the reverse of one of the coins the bar of the A is not visible.

DURHAM.

(1) *With Ordinary Mint-mark.*

	M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB }		
<i>Rev.</i> —CIVI TAS DUR EINE }	10	5

As a rule, the R has a well-marked notch in the tail.

(2) *With Mint-mark of Bishop Beck* (1283-1310).

		M.	
<i>Obv.</i> —EDWR'ANGL'DNSHYB }			
<i>Rev.</i> —CIVI TAS DVR E E }	.	.	1

A perusal of Messrs. Fox's paper has convinced me that this large group was capable of further sub-division. The Bristol and Lincoln pennies, as well as a certain proportion of the rest, must be earlier than the autumn of 1281, when the whole of the royal provincial mints, except Canterbury, were closed. On the other hand, Variety (2) of Durham, which bears the mint-mark of Bishop Beck—a cross-moline in the first quarter of the reverse—cannot have been struck before 1283. The common element that binds all the group together is the 'full-bodied' form of s. But its heterogeneous character was evident from the fact that it included several varieties of busts—notably Burns A19 and A22ff. Occasionally, especially at London and Bristol, L has the long, upturned foot that has already been remarked upon in connexion with Group VIII.

MULES involving Group X.

LONDON.

		M.	B.
<i>Obv.</i> —As Group VII. }			
<i>Rev.</i> —As Group X. }	.	.	2
<i>Obv.</i> —As Group X. }			
<i>Rev.</i> —As Group VII. }	.	.	2 2
<i>Obv.</i> —As Group X. }			
<i>Rev.</i> —As Group IX. }	.	.	7 4

CANTERBURY.

		B.
<i>Obv.</i> —As Group X. }		
<i>Rev.</i> —As Group IX. }	.	1

BRISTOL.

<i>Obv.</i> —As Group X. }					B.
<i>Rev.</i> —As Group IX. }	.	.	.	.	1

LINCOLN.

<i>Obv.</i> —As Group X. }					B.
<i>Rev.</i> —As Group VII. }	.	.	.	.	1

DURHAM.

<i>Obv.</i> —As Group X. }				M.	
<i>Rev.</i> —As Group IX. }	.	.	.	1	

GROUP XI.

LONDON.

<i>Obv.</i> —EDWR'ANGL'DNSHYB }				M.	B.
<i>Rev.</i> —CIVI TAS LON DON }	.	.	.	16	10

CANTERBURY.

<i>Obv.</i> —EDWR'ANGL'DNSHYB }				M.	B.
<i>Rev.</i> —CIVI TAS CAN TOR }	.	.	.	9	10

[Pl. VIII. 11.]

ROBERT DE HADELIE (Bury St. Edmunds).

<i>Obv.</i> —EDWR'ANGL'DNSHYB }				M.	B.
<i>Rev.</i> —ROBE RTVS DEh ADL' }	.	.	.	1	2

DURHAM.

<i>Obv.</i> —EDWR'ANGL'DNSHYB }				M.	B.
<i>Rev.</i> —CIVI TAS DVR EME }	.	.	.	1	1

For the most part this group corresponds to Burns A20 and 21. The characteristic feature is “the manner

in which the long semi-crescent, or comma, after R connects itself with the tail of that letter, forming with it a continuous line completely intersecting the legendary circle" (Burns, *Coinage of Scotland*, i. pp. 195f.). But the bust occasionally varies somewhat from the normal A20 and 21 type, notably at Canterbury and on the Mellendean example of the Durham penny. In point of date these pieces may well be as early as, or possibly earlier than, some of the later members of the group immediately preceding. The absence of coins struck at any of the (royal) provincial mints, save Canterbury, indicates the autumn of 1281 as the *terminus post quem*. On the other hand, the continued appearance of Robert de Hadelie's name points to some year not later than 1287.

GROUP XII.

LONDON.

Variety α .

	M.	B.
<i>Obv.</i> —•EDWR'ANGL'DNSHYB }		
<i>Rev.</i> —•CIVI TAS LON DON }	24	5

[Pl. VII. 14.]

Variety β .

	M.	B.
<i>Obv.</i> —•EDWR'ANGL'DNSHYB }		
<i>Rev.</i> —•CIVI TAS LON DON }	42	24

CANTERBURY.

Variety α .

	M.	B.
<i>Obv.</i> —•EDWR'ANGL'DNSHYB }		
<i>Rev.</i> —•CIVI TAS CAN TOR }	12	5

Variety β .

	M.	B.
<i>Obv.</i> —•EDWR'ANGL'DNSHYB }		
<i>Rev.</i> —•CIVI TAS CAN TOR }	28	10

The characteristic mark of Group XII. is the dot which appears before the legend both on obverse and on reverse. Two different busts occur—Burns A24 and A26. The S is ‘full-bodied,’ and the majority of the other letters are as before. The one conspicuous exception is $\mathfrak{A}$. In the case of Variety α , the place of the bar on that letter is supplied by a jagged-looking projection which leaves the inner side of the left leg at a point fairly low down, while the inner side of the right leg not infrequently presents a broken line also. In the case of Variety β , the bar is dispensed with altogether, the inner side of the legs being, as a rule, perfectly smooth.

MULES involving Group XII.

LONDON.

	M.	B.
<i>Obv.</i> —As Variety α . }		
<i>Rev.</i> —As Variety β . }		1
<i>Obv.</i> —As Variety β . }		
<i>Rev.</i> —As Variety α . }	1	5

CANTERBURY.

	M.
<i>Obv.</i> —As Variety α . }	
<i>Rev.</i> —As Group XI. }	1

GROUP XIII.

(*Single Pellet on King's Breast.*)

LONDON.

	M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB }		
<i>Rev.</i> —CIVI TAS LON DON }	8	4

[Pl. VIII. 12.]

CANTERBURY.

	M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB}		
<i>Rev.</i> —CIVI TAS CÁN TOR }	2	2

Small as is the number of examples of Group XIII., two or three different varieties of bust occurred, Burns A29 and A30 being both represented. Burns makes this the latest of the large-letter series of pennies, placing it immediately before the 'rose-on-breast' issue (Group XVII.) on the ground of certain resemblances in the crown and in the eyes of the obverse type. Messrs. Fox agree, at all events in so far as they regard it as subsequent in date to Group XIV. This view may well be correct. My original classification was based on the use of the barred $\bar{\alpha}$.

GROUP XIV.

(*Three Pellets on King's Breast.*)

LONDON.

	M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB}		
<i>Rev.</i> —CIVI TAS •LON DON }	17	11

[PL. VIII. 13.]

CANTERBURY.

Variety α .	M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB}		
<i>Rev.</i> —CIVI TAS CÁN •TOR }	5	5
Variety β .		
<i>Obv.</i> —EDWR'ANGL'DNSHYB}		
<i>Rev.</i> —CIVI •TAS CÁN TOR }	2	
Variety γ .		
<i>Obv.</i> —EDWR'ANGL'DNSHYB}		
<i>Rev.</i> —CIVI •TAS CÁN •TOR }	1	1

In this group the bust usually, though not invariably, corresponds to Burns A27.

MULES involving Group XIV.

LONDON.

		M.	B.
<i>Obv.</i> —As Group XIV. }		1	4
<i>Rev.</i> —As Group XII. β . }			
<i>Obv.</i> —As Group XII. β . }			1
<i>Rev.</i> —As Group XIV. }			
<i>Obv.</i> —As Group XIV. }		2	
<i>Rev.</i> —As Group XIII. }			

CANTERBURY.

			B.
<i>Obv.</i> —As Group XII. β . }			1
<i>Rev.</i> —As Group XIV. α . }			

GROUP XV.

DURHAM.

With Mint-mark of Bishop Beck (1283-1310).

		M.	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB }		4	1
<i>Rev.</i> —CIV ITAS DVR EIII E }			

The mint-mark, a cross-moline, is placed immediately before the legend both on obverse and on reverse. This small group, which cannot, of course, be earlier than 1283, has a bust resembling Burns A25. The letter α shows some variation. In one instance it is distinctly and firmly barred. In another there is no bar at all, while in the remaining three cases the bar is produced as on Group XII., Variety α .

GROUP XVI.

LONDON.

Variety *a*.

		M.
<i>Obv.</i> —EDWR'ANGL'DNSHYB}		
<i>Rev.</i> —CIVI TAS LON DON }		1

The bust here does not exactly correspond to any of Burns's varieties.

Variety *β*.

		B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB}		
<i>Rev.</i> —CIVI TAS LON DON }		1

[Pl. VIII. 14.]

The bust here resembles Burns A28.

CANTERBURY.

		M.
<i>Obv.</i> —EDWR'ANGL'DNSHYB}		
<i>Rev.</i> —CIVI TAS CAN TOR }		2

Here again Burns A28 presents the closest analogy. The form of the N differs slightly from that found on other coins of this group.

BURY ST. EDMUNDS.

		B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB}		
<i>Rev.</i> —VIL LANS EDI VDI }		1

As the name of Robert de Hadelie has disappeared, this coin can hardly be earlier than the autumn of 1287. The type again resembles Burns A28.

DURHAM.

*With Mint-mark of Bishop Beck (1283-1310).*Variety *a*.

<i>Obv.</i> —EDWR'ANGL'DNSHYB }	M.
<i>Rev.</i> —CIV ITAS DVR EME }	1

[Pl. VII. 15.]

Variety *β*.

<i>Obv.</i> —EDWR'ANGL'DNSHYB }	
<i>Rev.</i> —CIV ITAS DVR EME }	1

In both cases the bust resembles Burns A28, and in both cases there is a cross-moline before the legend both on obverse and on reverse. On Variety *a*, however, the ends of the cross-moline are curiously formed of annulets.

MULES involving Group XVI.

LONDON.

<i>Obv.</i> —As Group XIV. }	B.
<i>Rev.</i> —As Group XVI. }	1

CANTERBURY.

<i>Obv.</i> —As Group XII. <i>β</i> . }	M.	B.
<i>Rev.</i> —As Group XVI. }		1
<i>Obv.</i> —As Group XVI. }		
<i>Rev.</i> —As Group XIV. <i>β</i> . }	1	

DURHAM.

<i>Obv.</i> —As Group XVI. <i>a</i> . }	B.
<i>Rev.</i> —As Group XV. }	1

But for a mule to be described presently (see *infra*,

p. 87), this brings us to the end of the representatives of the 'large-letter' series. Before we pass on to the 'small-letter' groups, mention should be made of three 'large-letter' imitations, over and above the set with EDWRE, which has already been recorded (see *supra*, p. 65). All three were in the Mellendean hoard, and two of them bore the name of the London mint, blundered, while the third bore the name of the Durham mint, also blundered.

GROUP XVII.

(*Rose on King's Breast.*)

LONDON.

	M.	B.
Obv.—EDWR'ANGLDNSHYB }		
Rev.—QIVI TTS LONDON }	1	4

[Pl. VIII. 15.]

The 'rose-on-breast' pennies are Burns A31. Note the doubling of the transverse stroke of the N, peculiarly characteristic of this group. Henceforward c is usually closed, being formed of a crescent with a tall upright stroke in front of it, although the place of the upright stroke is sometimes taken by two triangular wedges arranged so that their points almost meet. A tendency towards closing also betrays itself in e. Messrs. Fox place these coins not later than 1294.

GROUP XVIII.

LONDON.

	B.
Obv.—EDWR'ANGL'DNSHYB }	
Rev.—QIVI TTS LON DON }	3

Group XVIII., from which the rose has already disappeared, is Burns A32. Its distinctive features are (1) the apostrophe after hYB, and (2) the curved stems of the upright strokes in the legend. On the obverse of one of these three pieces $\mathfrak{A}$ is used for π .

GROUP XIX.

• LONDON.

		M.	B.
<i>Obv.</i> —EDWR'ANGL'DNShYB'}		1	23
<i>Rev.</i> —QIVI TAS LON DON }			

[Pl. VIII. 16.]

DURHAM.

With Mint-mark of Bishop Beck (1283–1310).

		B.
<i>Obv.</i> —EDWR'ANGL'DNShYB'}		2
<i>Rev.</i> —QIVI TAS DVR EI IE }		

This group corresponds to Burns A33 and A34, and the contraction mark after hYB is characteristic. The letters are now distinctly smaller. C is nearly always closed, although on the two Durham coins it has the half-closed appearance described under Group XVII. S varies in shape, but is usually full-bodied with an egg-shaped swelling towards the centre. At Durham the cross-moline of Bishop Beck occupies the place of the mint-mark on the obverse.

MULES involving Group XIX.

LONDON.

		M.
<i>Obv.</i> —As Group XVI. a. }		1
<i>Rev.</i> —As Group XIX. }		

[Pl. VII. 16.]

So far as the English pennies of Edward I are concerned, we have now exhausted the contents of the Mellendean hoard. This enables the date of deposit to be fixed within comparatively narrow limits. The whole of the foregoing coins are earlier than the great issue of 1300. The absence of any specimens of that issue is particularly significant. We may safely decide on *circa* 1295–1299 as the approximate limits of which we are in search. The evidence supplied by the Foreign Sterlings has, as we shall see, a precisely similar bearing.

<i>Obv.</i> —EDWR'ANGL'DNSHYB'}	B.
<i>Rev.</i> —As Group XIX. }	1
[PL IX. 1.]	

While the obverse of this piece seems, on the whole, to belong to the 'large-letter' series, the bust shows no very marked likeness to any of the groups enumerated above.

GROUP XX.

LONDON.

Variety α (star on King's breast).

<i>Obv.</i> —EDWR'ANGL'DNSHYB'}	B.
<i>Rev.</i> —QIVI TΛS LON DON }	9
[PL IX. 2.]	

In one case $\mathfrak{A}$ is barred both on obverse and on reverse.

Variety γ (star on King's breast).

<i>Obv.</i> —EDWR'ANGL'DIISHYB'}	B
<i>Rev.</i> —QIVI TΛS LOII DOII }	6

Variety δ (no star).

<i>Obv.</i> —EDWR'ANGL'DIISHYB'}	
<i>Rev.</i> —QIVI TΛS LOII DOII }	3

CANTERBURY.

Variety α (star on King's breast).	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB' }	2
<i>Rev.</i> —QIVI TAS QAN TOR }	

In one case the $\bar{A}$ on the reverse is barred.

Variety γ (star on King's breast).	
<i>Obv.</i> —EDWR'ANGL'DIISHYB' }	1
<i>Rev.</i> —QIVI TAS QAN TOR }	

BURY ST. EDMUNDS.

Variety α (star on King's breast).	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB' }	1
<i>Rev.</i> —VILL' SQIE DNV NDI }	

Variety β (no star).	
<i>Obv.</i> —EDWR'ANGL'DNSHYB' }	1
<i>Rev.</i> —VILL SQIE DNV NDI }	

DURHAM.

With Mint-mark of Bishop Beck (1283–1310).

Variety α (star on King's breast).	B.
<i>Obv.</i> —EDWR'ANGL'DNSHYB' }	2
<i>Rev.</i> —QIVI TAS DVR EI IE }	

The place of the usual mint-mark on the obverse is occupied by the cross-moline of Bishop Beck.

This group is very closely related to that which follows. The use of apostrophes differentiates the two. The peculiar form of s is highly characteristic; it is 'full-bodied' and has twisted ends. The apostrophe after HYB, though by no means constantly employed, is usual.

CANTERBURY.

Variety α (star on King's breast).	B.
<i>Obv.</i> —EDWRANGLDNShYB }	15
<i>Rev.</i> —QIVI TAS AN TOR }	

One reads TAS for AN.

Variety β (no star).

<i>Obv.</i> —EDWRANGLDNShYB }	13
<i>Rev.</i> —QIVI TAS AN TOR }	

NEWCASTLE.

Variety α (star on King's breast).	B.
<i>Obv.</i> —EDWRANGLDNShYB }	2
<i>Rev.</i> —VILL NOV TAS TRI }	

One of these [Pl. IX. 4] reads VIL' for VILL.

Variety β (no star).

<i>Obv.</i> —EDWRANGLDNShYB }	2
<i>Rev.</i> —VILL NOV TAS TRI }	

BRISTOL.

Variety α (star on King's breast).	B.
<i>Obv.</i> —EDWRANGLDNShYB }	6
<i>Rev.</i> —VILL BRI STO LIE }	

Variety β (no star).

<i>Obv.</i> —EDWRANGLDNShYB }	4
<i>Rev.</i> —VILL BRI STO LIE }	

YORK (Ordinary Mint).

Variety α (star on King's breast).	B.
<i>Obv.</i> —EDWRANGLDNShYB }	9
<i>Rev.</i> —QIVI TAS EBO RAN }	

Variety β (no star).	B.
<i>Obv.</i> —EDWRANGLDnShYB }	4
<i>Rev.</i> —QIVI TAs EBO RANCI }	

EXETER.

Variety α (star on King's breast).	B.
<i>Obv.</i> —EDWRANGLDnShYB }	3
<i>Rev.</i> —QIVI TAs EXO nne }	

In one case N appears, instead of n on the reverse.

KINGSTON-ON-HULL.

Variety β (no star).	B.
<i>Obv.</i> —EDWRANGLDnShYB }	7
<i>Rev.</i> —VIL RYn GES TON }	

In one instance the obverse inscription has N for n, for which *cf.* Variety β of Group XX.

YORK (Archiepiscopal Mint).

Variety β (no star).	B.
<i>Obv.</i> —EDWRANGLDnShYB }	1
<i>Rev.</i> —QIVI TAs EBO RANCI }	

There is an open quatrefoil in the centre of the reverse.

BURY ST. EDMUNDS.

Variety β (no star)	B.
<i>Obv.</i> —EDWR°ANGL'DnShYB' }	1
<i>Rev.</i> —VILL SQIE DHV nDI }	

The presence of contraction marks, the barred α , and the peculiar form of M—a form which occurs also at Durham—all deserve notice.

DURHAM.

(1) *With Ordinary Mint-mark.*

Variety α (star on King's breast).	B.
<i>Obv.</i> —EDWRANGLDNShYB }	7
<i>Rev.</i> —QIVI TAS DVR EIIE }	

One of these has N on the obverse. On the reverse of another M takes the form H.

Variety β (no star).	B.
<i>Obv.</i> —EDWRANGLDNShYB }	5
<i>Rev.</i> —QIVI TAS DVR EHIE }	

In one case H is used for H.

(2) *With Mint-mark of Bishop Beck (1283–1310).*

Variety α (star on King's breast).	B.
<i>Obv.</i> —EDWRANGLDNShYB }	1
<i>Rev.</i> —QIVI TAS DVR EIIE }	

The cross-moline of Bishop Beck takes the place of the ordinary mint-mark on the obverse. The use of the form N is noticeable.

Variety β (no star).	B.
<i>Obv.</i> —EDWRANGLDNShYB }	1
<i>Rev.</i> —QIVI TAS DVR EIIE }	

This again has the mint-mark of Beck on the obverse.

The distinguishing features of Group XXI. are the smaller diameter of the coins, the smaller size of the letters, and the general absence of contraction marks. ϵ was no longer quite the same shape as it had before; the ends are, so to say, less aggressive. α is always closed. ϵ is still open, although with an increasing

tendency to close. The length of the turned-up foot of L is remarkable. The bust is Burns A37. As Burns pointed out, the list of mints proves beyond all doubt that this group represents the coinage of 1300. Group XX. can be little, if at all, earlier.

MULES involving Group XXI.

CANTERBURY. *

		B.
<i>Obv.</i> —As Group XXI. β .	}	2
<i>Rev.</i> —As Group XX. α .		

BURY ST. EDMUNDS.

		B.
<i>Obv.</i> —As Group XXI. α .	}	1
<i>Rev.</i> —As Group XX. α .		

GROUP XXII.

LONDON.

		B.
<i>Obv.</i> —EDWΛRDRΛNGL'DNSHVB'}	}	11
<i>Rev.</i> —QIVI TΛS LON DON		

CANTERBURY.

		B.
<i>Obv.</i> —EDWΛRDRΛNGL'DNSHVB'}	}	14
<i>Rev.</i> —QIVI TΛS QΛN TOR		

[Pl. IX. 5.]

In one case N on the reverse has the form n.

NEWCASTLE.

		B.
<i>Obv.</i> —EDWΛRDRΛNGL'DNSHVB'}	}	3
<i>Rev.</i> —VILL NOVI QΛS TRI		

In one case the I of NOVI is omitted.

DURHAM.

<i>Obv.</i> —EDWARD RANGL'DNSHYB'}	B.
<i>Rev.</i> —QIVI TTS DVR EHE }	4

One of these appears to have H for H on the reverse.

The group just described inaugurates important changes. The time-honoured EDWR' of the obverse legend is abandoned, and the lys at each side of the King's crown are henceforward bifoliate.¹⁰ The bust is usually Burns A38, although A39 occasionally occurs. The letters are slightly larger than on the coins of Group XXI., while the shape is often different. N, for instance, is $\mathbb{N}$, and α is closed in a rather different fashion, two tall triangular wedges being made to meet at the vertices. The contraction signs are inserted less regularly than would appear from the inscriptions as printed. Sometimes they are altogether omitted.

The set of mules to be noted immediately proves clearly that, as Burns perceived, Group XXII. must have trodden pretty closely on the heels of Group XXI. Messrs. Fox place its issue *circa* 1302, and indicate that they mean to produce documentary evidence of date.

MULES involving Group XXII.

LONDON.

<i>Obv.</i> —As Group XXII. }	B.
<i>Rev.</i> —As Group XXI. }	31

One coin reads DNSHY. Another [Pl. IX. 6] shows two dots in the field of the obverse, one on either side of the King's neck, as well as a third on his breast.

¹⁰ For a single exception see *infra*, p. 97 f.

NEWCASTLE.

		B.
<i>Obv.</i> —As Group XXI. β.	}	5
<i>Rev.</i> —As Group XXII.		

One reads VIL' NOV QAS TRI.

GROUP XXIII.

LONDON.

		B.
<i>Obv.</i> —EDWR'R'ANGL'DNSHYB'	}	7
<i>Rev.</i> —QIVI TAS LON DON		

In two cases the W is not interlinked, although the form of its component parts suggests that this is a mere accident [Pl. IX. 7]. In two others B is so peculiarly shaped as almost to resemble a D, thus—D—a feature which recurs as late as Group XXIX.¹¹ In one case there is a dot beneath the apostrophe after hYB.

CANTERBURY.

		B.
<i>Obv.</i> —EDWR'R'ANGL'DNSHYB'	}	3
<i>Rev.</i> —QIVI TAS QAN TOR		

In one case the W is interlinked. On none of the three coins is an apostrophe visible after hYB.

The letters on this little group have many points in common with those on Group XXII., notably the interlinked w. Yet there are differences, the most striking being in the i. With the exception of one Canterbury coin, which has II, all the other members of the group have 𐌺. The busts include examples both of Burns A38 and of A39.

¹¹ Compare also Group A, Variety β, of the Berwick coins, *infra*, p. 108.

From this point onwards the task of classification becomes much more difficult. I believe that, with greater leisure than I was able to command, a close study of such a mass of material as was recovered at Blackhills might have furnished valuable clues. As it was, I had to be content with a rough arrangement, based mainly on changes in the forms of the letters, and bound, therefore, to be so far unsatisfactory, seeing that these changes occur and recur somewhat irregularly. The episcopal coins of Durham, with their distinctive mint-marks, of course provide the chronological key. Numismatists will await with keen anticipation the publication by the Messrs. Fox of the results of their researches in this portion of the wide field which they have set out to illuminate.

It may be well to begin by describing certain coins which connect the group that follows with the coinage of 1300 and so with XXII. and XXIII.

LINKS between Groups XXI. and XXIV.

LONDON.

		B.
<i>Obv.</i> —As Group XXIV. }		
<i>Rev.</i> —As Group XXI. }		4

The obverse is Burns A39, but the busts vary somewhat. In one instance there is an apostrophe after hYB.

NEWCASTLE.

		B.
<i>Obv.</i> —æDWARRANGLDNShYB }		
<i>Rev.</i> —VILL NOVI αKS TRI }		1

The obverse here has many features in common with Burns A39. But the significant fact about it is that

the fleurs-de-lys at the sides of the crown are trifoliate, as they were in Group XXI. and preceding groups, not bifoliate as they are from Group XXII. onwards. This means that the irons employed for stamping the crown on the dies of the older series were used to produce the corresponding part of the particular obverse die from which this piece was struck, the remaining parts being stamped from Group XXII. irons. There were three similar coins in the Montrave hoard. That the mint of Newcastle at this period made its dies locally from irons supplied from London, is clear from evidence brought forward by Messrs. Fox in their *Introduction* (p. 8).¹² Apart from the closed æ, which is henceforward universal, the most noteworthy letters are R, which is not joined at the waist but has the form [R], and I, the sides of which are curved [I].

GROUP XXIV.

DURHAM.

With Mint-mark of Bishop Beck (1283–1310).

	B.
<i>Obv.</i> —æDWΛRRΛNGLDNshYB }	
<i>Rev</i> —αIVI TΛS DVR αMæ }	4

The cross-moline of Beck takes the place of the usual mint-mark on the obverse. One of these has two apostrophes—æDWΛR'R' [Pl. IX. 8]. All of them have the open-waisted R, and one of them has the I with curving sides, both as described in connexion with the immediately preceding Newcastle penny. The remaining three have the straight-sided I of Group XXI. Through-

¹² See *British Numismatic Journal*, vol. vi.

out the whole of Group XXIV.¹³ æ is usually rounded, thus—. Occasionally, however, the angular form occurs—. L is also typical—. The bust resembles Burns A39.

LONDON.

		B.
<i>Obv.</i> —æDWARRANGLDNShYB	}	26
<i>Rev.</i> —QIVI TAs LON DON		

Four of these have an apostrophe after hYB' [Pl. IX. 9]. On all of them the l has curving sides. The remarks made above as to R, L, and æ apply here also.

CANTERBURY.

		B.
<i>Obv.</i> —æDWARRANGLDNShYB	}	32
<i>Rev.</i> —QIVI TAs QAN TOR		

In one case there is an interlinked W. Otherwise the letters are as at London. These coins are hard to distinguish from Group XXIX.

BURY ST. EDMUNDS.

		B.
<i>Obv.</i> —æDWARRANGLDNShYB	}	5
<i>Rev.</i> —VILL SCIæ DMV NDI		

The characteristic letters are as at London. In one case M appears as ll.

¹³ These remarks on æ apply to Beck's money generally, and of course to the contemporary issues of other mints.

GROUP XXV.

(1) *With Mint-mark of Bishop Beck (1283-1310).*

<i>Obv.</i> —αDWΛRRΛNGLDNShYB}	B.
<i>Rev.</i> —αIVI TΛS DVR αMα }	8

The cross-moline of Beck takes the place of the usual mint-mark on the obverse. The characteristic letters are as on Group XXIV., except that R is now closed at the waist and has a short squat appearance.

(2) *With Ordinary Mint-mark.*

<i>Obv.</i> —αDWΛRRΛNGLDNShYB}	B.
<i>Rev.</i> —αIVI TΛS DVR αMα }	1

The lettering is as on (1).

GROUP XXVI.

DURHAM.

(1) *With Mint-mark of Bishop Beck (1283-1310).*

<i>Obv.</i> —αDWΛRRΛNGLDNShYB}	B.
<i>Rev.</i> —αIVI TΛS DVR αMα }	48

The bust resembles Burns A40, &c. The lettering is as on Group XXV., except that in one or two cases R has the open-waisted form of Group XXIV. The cross-moline is in its usual place on the obverse.

(2) *With Ordinary Mint-mark.*

<i>Obv.</i> —αDWΛRRΛNGLDNShYB}	B.
<i>Rev.</i> —αIVI TΛS DVR αMα }	15

One of these has an apostrophe after hYB, while another has two pellets, one above another.

LONDON.

	B.
<i>Obv.</i> —æDWÆRÆNGLDShYB }	330
<i>Rev.</i> —αIVI TÆS LON DON }	

The characteristic letters are as at Durham. Two of the coins have hYB', one [Pl. IX. 10] has hY:B:B, one hYB:B, six hYB:B, and one hYB:

CANTERBURY.

	B.
<i>Obv.</i> —æDWÆRÆNGLDShYB }	170
<i>Rev.</i> —αIVI TÆS αÆN TOR }	

The characteristic letters are as usual. Two of the coins have a comma after hYB, while one has two annulets, one above another, with a comma placed horizontally between them.

BURY ST. EDMUNDS.

	B.
<i>Obv.</i> —æDWÆRÆNGLDShYB }	12
<i>Rev.</i> —VILL SCIæ DMV NDI }	

The characteristic letters are as usual.

The number of coins belonging to this group is very large. The majority were probably minted under Edward I. The later ones may fall into the reign of Edward II., which commenced in 1307.

MULES involving Group XXVI.

CANTERBURY.

	B.
<i>Obv.</i> —As Group XXVI. }	7
<i>Rev.</i> —As Group XXIV. }	

There were many indications of 'muling' at London

and at Durham between Group XXVI. and Group XXIV. But it proved impossible, in the time available, to sort out the specimens with the same confidence as at Canterbury.

GROUP XXVII.

DURHAM.

(1) *With Mint-mark of Bishop Beck* (1283–1310).

	B.
<i>Obv.</i> —æDWÆRÆNGLDNShYB }	
<i>Rev.</i> —αIVI TÆS DVR æMæ }	13

The characteristic letters are exactly as on Group XXVI. except that i now becomes straight-sided, I. In one instance hYB is followed by three pellets, placed one above another [Pl. IX. 11]. The cross-moline is as usual.

(2) *With Ordinary Mint-mark.*

	B.
<i>Obv.</i> —æDWÆRÆNGLDNShYB }	
<i>Rev.</i> —αIVI TÆS DVR æMæ }	3

Here the most noteworthy point is that one of the three coins has the large R which is characteristic of Bishop Kellow's money. That it was struck under Bishop Beck is nevertheless shown by the form of the city name. This confirms what Burns says as to the large R having begun to appear "previous to the close of the Beck period."

LONDON.

	B.
<i>Obv.</i> —æDWÆRÆNGLDNShYB }	
<i>Rev.</i> —αIVI TÆS LON DON }	73

The characteristic letters are as at Durham. hYB: occurs twice and hYB: once.

CANTERBURY.

		B.
<i>Obv.</i> —ÆDWÆRÆNGLDNShYB }		
<i>Rev.</i> —ÆIVI TÆS ÆÆN TOR }		42

The characteristic letters are as above. In one case L has been accidentally omitted on the obverse. In another the transverse stroke of N on the reverse has not been filled in. Two of the coins have hYB:

BURY ST. EDMUNDS.

		B.
<i>Obv.</i> —ÆDWÆRÆNGLDNShYB }		
<i>Rev.</i> —VILL SCIÆ DMV NDI }		8

The characteristic letters are as above.

GROUP XXVIII.

DURHAM.

With Mint-mark of Bishop Kellow (1311–1316).

		B.
<i>Obv.</i> —ÆDWÆRÆNGLDNShYB }		
<i>Rev.</i> —ÆIVI TÆS DVN ÆLM }		36

This group includes Burns A44–46. The lettering is identical with that on Group XXVII., except that the R is larger and is frequently disjoined at the waist. The straight-sided l is very characteristic. At the end of the reverse inscription the upper part of the cross is bent to the left so as to form the head of a crozier—Kellow's mint-mark. Note the change in the form of the city name.

LONDON.

		B.
<i>Obv.</i> —ÆDWÆRÆNGLDNShYB }		67
<i>Rev.</i> —ÆIVI TÆS LON DON }		

The lettering is as at Durham, the large R—frequently disjoined—and the straight-sided I being specially worthy of note.

CANTERBURY.

		B.
<i>Obv.</i> —ÆDWÆRÆNGLDNShYB }		61
<i>Rev.</i> —ÆIVI TÆS CÆN TOR }		

Four of these pieces have two annulets, one above another, after hYB. One reads CÆN TOR CÆN TOR on the reverse. As to the lettering generally, see under London.

BURY ST. EDMUNDS.

		B.
<i>Obv.</i> —ÆDWÆRÆNGLDNShYB }		5
<i>Rev.</i> —VILL SÆIÆ DMV NDI }		

The lettering here is as at the other mints.

MULES involving Group XXVIII.

CANTERBURY.

		B.
<i>Obv.</i> —As Group XXVIII. }		1
<i>Rev.</i> —As Group XXVII. }		
<i>Obv.</i> —As Group XXVII. }		1
<i>Rev.</i> —As Group XXVIII. }		

GROUP XXIX.

DURHAM.

(1) *With Mint-mark of Bishop Kellow (1311-1316).*

<i>Obv.</i> —ÆDWÆRRÆNGLDNSHYB}	B.
<i>Rev</i> —QIVI TÆS DVN ÆLM }	18

[Pl. IX. 12.]

The bust here is chiefly Burns A46, and the mint-mark is a crozier at the end of the reverse inscription. For the most part the lettering is identical with that on Group XXVIII. The sides of the i, however, are no longer straight, while the letter itself tends to be short and dumpy-looking. W occasionally show signs of interlinking. One of the coins has two pellets after TÆS.

(2) *With Mint-mark of Bishop Beaumont (1317-1333).*

<i>Obv.</i> —ÆDWÆRRÆNGLDNSHYB}	B.
<i>Rev.</i> —QIVI TÆS DVN ÆLM }	39

The usual bust is Burns A48. The lettering is as on (1), except that the tendency towards interlinking of the w is decidedly more pronounced. The place of the ordinary mint-mark on the obverse is occupied by a lion rampant left. In four out of the thirty-nine cases, there is a single fleur-de-lys in front of the lion; in twenty-two cases there is a single fleur-de-lys both in front and behind; and in eleven cases there are two fleurs-de-lys in front, one above another. The surface of the two remaining coins is so much rubbed that the details of the mint-mark are obscure.

(3) *With Ordinary Mint-mark.*

<i>Obv.</i> —αDWΛRRΛNGLDNShYB}	B.
<i>Rev.</i> —αIVI TΛS DVN αLM }	3

The lettering is as on (1) and (2)

LONDON.

<i>Obv.</i> —αDWΛRRΛNGLDNShYB}	B.
<i>Rev.</i> —αIVI TΛS LON DON }	34

The lettering is as at Durham, including an occasional tendency to the interlinking of W [Pl. IX. 13]. The unusual height of the upturned foot of L is also worth noting. α is sharply angular (see *supra*, p. 99).

CANTERBURY.

<i>Obv.</i> —αDWΛRRΛNGLDNShYB}	B.
<i>Rev.</i> —αIVI TΛS αAN TOR }	36

The lettering is as at London. As was remarked above, this group is not easy to distinguish from Group XXIV. The angular α is, perhaps, the best test as between the two.

BURY ST. EDMUNDS.

<i>Obv.</i> —αDWΛRRΛNGLDNShYB}	B.
<i>Rev.</i> —VILL SCIα DMV NDI }	13

Two of these coins are somewhat unlike others of the group. One of them is reproduced here [Pl. IX. 14].

MULES involving Group XXIX.

DURHAM.

With Mint-mark of Bishop Kellow (1311-1316).

<i>Obv.</i> —As Group XXIX. }	B.
<i>Rev.</i> —As Group XXVIII. }	3

. LONDON.

<i>Obv.</i> —As Group XXIX. }	B.
<i>Rev.</i> —As Group XXVIII. }	6

CANTERBURY.

<i>Obv.</i> —As Group XXIX. }	B.
<i>Rev.</i> —As Group XXVIII. }	6

Besides the English pennies described above, the Blackhills hoard contained thirteen which it was not possible to assign definitely to any of the foregoing groups. In one or two instances this was due to their poor condition. In the majority of cases it was because they were obvious imitations. Eight of the thirteen were, or purported to be, of the London mint. The rest were of Canterbury. One of the Canterbury coins, which combined a 'bifoliate' crown with the legend EDWR, is figured here [Pl. IX. 15]. On it the α was slightly angular, R was disjoined at the waist, and l had curved sides. The weight was 19·8 grains.

The solitary farthing found at Blackhills weighed 4·7 grains. From the general character of the lettering I should be disposed to place it fairly early, perhaps as early as Group XII. It may be thus described—

<i>Obv.</i> —EDWARDVSREX }	B.
<i>Rev.</i> —CIVI TAS LON DON }	1

The coins struck at Berwick have been reserved for separate treatment. The mint there seems to have been fairly active from the date of Edward I's capture of the town in 1296 down to its recovery by Robert the Bruce in 1318. But it appears to have stood towards the central authority in a relation quite different from that occupied by the English provincial mints, whether royal or ecclesiastical. Hence its issues form a class by themselves. The workmanship of many of the specimens is rough and careless to a degree. Some of the worst are probably imitations. The shapes of R, E, and N vary considerably, sometimes on the same coin. It is possible to distinguish two main groups, that which is placed first here being doubtless the earlier in time.

GROUP A.

With Trifoliate Lys at sides of Crown.

Variety α .		B.
<i>Obv.</i> —EDWR Λ NGLDNShYB }		3
<i>Rev.</i> —VILL Λ BE REV ICI }		
Variety β .		
<i>Obv.</i> —EDWR Λ NGLDNShYD ¹⁴ }		5
<i>Rev.</i> —VILL Λ BE REV ICI }		
Variety γ .		
<i>Obv.</i> —EDW Λ R Λ NGLDNShYB }		14
<i>Rev.</i> —VILL Λ BE REV VICI }		
Variety δ .		
<i>Obv.</i> —EDW Λ R Λ NGLDNShYB }		2
<i>Rev.</i> —VILL Λ BE REW ICI }		
Variety ϵ .		
<i>Obv.</i> —EDW Λ R Λ NGLDNShYB }		1
<i>Rev.</i> —VIL L Λ B ERE VICI }		

¹⁴ See *supra*, p. 96.

Variety ζ. B.

Obv.—EDWΛRΛNGLDNShYB }
Rev.—WIL LΛB ERE VICI } 1

Variety η (pellet on King's breast).

Obv.—EDWΛRΛNGLDNShYB }
Rev.—VILL ΛBE REV VICI } 7

•GROUP B.

With Bifoliate Lys at sides of Crown.

Variety α (pellet on King's breast). B.

Obv.—EDWΛRΛNGLDNShYB }
Rev.—VILL ΛBE REV VICI } 21

Burns took special note of this variety, which is distinguished by the thick rings, like spectacles, round the eyes.

Variety β (pellet on King's breast).

Obv.—EDWΛRΛNGIDNShYB }
Rev.—VILL ΛBE REV VICI } 6

On the obverse of these pieces the L is not distinguishable from I and the second N is Lombardic.

Variety γ. B.

Obv.—EDWRΛNGL · DNS · hYB · }
Rev.—VILL ΛBE REV VICI } 1

Variety δ.

Obv.—EDWRΛNGL · DNS · hYB · }
Rev.—VILL ΛBE REW ICI } 1

Variety ε.

Obv.—EDWΛRΛNGLDNShYB }
Rev.—∴VIL LΛB ERE WYCI } 5

Variety ζ. B.

Obv.—EDWARRANGLDNSHYB }
Rev.—E VIL LAB ERE WYCI } 2

[Pl. IX. 16.]

The foregoing are all pennies. The following half-penny, which weighs 10 grains, has the 'trifoliate' type of crown, and is therefore contemporary with Group A, probably Variety γ:—

Obv.—EDWARRANGLDNSHYB } B.
Rev.—VILL AB E REV VICI } 1

It will not have escaped observation that the whole of the Berwick coins came from the Blackhills find. The absence of any corresponding pieces at Mellendean is a highly significant circumstance, to which we shall have occasion to return. Meanwhile the record of the issues bearing the name of Edward has to be completed by a list of the Irish pennies in the two hoards. With a single exception, which will be noticed in its proper place, all of these have the bust, on the obverse, set in the triangular framework so characteristic of the Irish mints. The crown seems always to be of the 'trifoliate' type.

DUBLIN.

Variety α (three pellets on King's breast). M. B.

Obv.—EDW·R'· ANGL·'D NŚ·HYB }
Rev.—CIVI TKS DVBL INIE } . 4 11

On this and the other varieties where they occur, the three pellets are arranged ∴. Occasionally the upper one is lost in the folds of the drapery, giving the impression of there being two only. Sometimes the dot after S is omitted.

Variety β (three pellets on King's breast).	M.	B.
<i>Obv.</i> —· EDW·R'. ANGL·D N $\bar{S}$ ·hYB }	.	3
<i>Rev.</i> —CIVI T $\bar{A}$ S DVBL INIE }		

Variety γ (three pellets on King's breast).		
<i>Obv.</i> —⦿ EDW·R'. ANGL·D N $\bar{S}$ ·hYB }	.	1
<i>Rev.</i> —CIVI T $\bar{A}$ S DVBL INIE }		

Variety δ (three pellets on King's breast).		
<i>Obv.</i> —EDWR' ANGL'D N $\bar{S}$ hYB' }	.	2
<i>Rev.</i> —CIVI T $\bar{A}$ S DVBL INIE }		

Variety ϵ (one pellet on King's breast).		
<i>Obv.</i> —EDWR' ANGL'D N $\bar{S}$ hYB' }	.	5
<i>Rev.</i> —CIVI T $\bar{A}$ S DVBL INIE }		

Variety ζ (no pellets).		
<i>Obv.</i> —EDWR' ANGL'D NShYB }	.	1
<i>Rev.</i> —CIVI T $\bar{A}$ S DVBL INIE }		

WATERFORD.

Variety α (no triangle on <i>obv.</i>).	M.	B.
<i>Obv.</i> —EDWR' ANGL'D NShYB }	.	1
<i>Rev.</i> —CIVI T $\bar{A}$ S V $\bar{A}$ TE RFOR }		

Variety β (three pellets on King's breast).		
<i>Obv.</i> —· EDW·R'. ANGL·D N $\bar{S}$ ·hYB' }	.	3
<i>Rev.</i> —CIVI T $\bar{A}$ S V $\bar{A}$ TE RFOR }		

Variety γ (three pellets on King's breast).		
<i>Obv.</i> —· EDW·R'. ANGL·D N $\bar{S}$ ·hYB' }	.	7
<i>Rev.</i> —CIVI T $\bar{A}$ S W $\bar{A}$ TE RFOR }		

In the majority of these cases the dot after s on the obverse is omitted.

In connexion with the Scottish single-long-cross pennies, which fall to be mentioned next, the salient features

were the great preponderance of Alexander III's issues, even at Blackhills, and the exceptionally good condition of many of the specimens of his money. In the latter respect they compared very favourably with the coins of Balliol and of Robert Bruce.

ALEXANDER III.

		M.	B.
<i>Obv.</i> —+ ΑLEXΑΝΔΕΙGRΑ }	•	63	28
<i>Rev.</i> —REX SCO TOR VM+ }	•		

Some of the earlier examples—these included an example of Burns I. i.—had the Α barred, but that was the exception. One, which had four five-pointed mullets on the reverse, had also a single pellet in the first quarter and a pellet on each side of the mullet in the third quarter.

JOHN BALLIOL.

Variety <i>a</i> .		M.	B.
<i>Obv.</i> —+ IOHΑΝΝΕSDEIGRΑ }			4
<i>Rev.</i> —+ RE XSC OTO RVM }	•		

One of these has M.

Variety *β*.

<i>Obv.</i> —+ IOHΑΝΝΕSDEIGR }		2	1
<i>Rev.</i> —+ RE XSC OTO RVM }	•		

Variety *γ*.

<i>Obv.</i> —+ IOHΑΝΝΕSDEIGRΑ }			1
<i>Rev.</i> —CIVI TΑΣ SΑN DRE }	•		

Variety *δ*.

<i>Obv.</i> —+ IOHΑΝΝΕSDEIGR }			1
<i>Rev.</i> —CIVI TΑΣ SΑM DRE }	•		

This coin is of particularly coarse workmanship.

MULE.

<i>Obv.</i> —As John Balliol (Variety a)	}	. . .	B.
<i>Rev.</i> —As Alexander III			1

ROBERT BRUCE.

<i>Obv.</i> + : ROBERTVS : DEI : GRA :	}	. . .	B.
<i>Rev.</i> —SCO TOR VMR EX+			6

A curiosity in the Blackhills hoard was the thin skin of the reverse of what had evidently been a plated coin of Alexander III. It was well executed, and was complete save for a small hole in the centre. One could bend it as easily as paper.

The Foreign Sterlings, so numerous at Mellendean, may be conveniently arranged on the basis adopted by Chautard, in his *Monnaies au type esterlin*, and briefly described by reference to that useful work.

FLANDERS.

Gui de Dampierre (1280–1305).

<i>Mint of Namur.</i>	M.
Chautard No. 1	16

All of these end with € on the reverse; the C in Chautard appears to be a mere misprint, as his plate shows €. All have M, not N, on the obverse; and one has AR ligatured.

Chautard No. 3	M.	B.
	1	
<i>Mint of Alost.</i>		
Chautard No. 9		1
Chautard No. 10	1	

The ‘*point secret*’ on the latter of these is on M, not on L as in Chautard’s description.

		M.	B.
<i>Obv.</i> —As Chautard No. 10}			
<i>Rev.</i> —As Chautard No. 9 }	.	1	

Robert de Béthune (1305–1322).

Mint of Alost.

Chautard No. 12	.	.	.	1
Chautard No. 13	.	.	.	1

HAINAUT.

Jean d'Avesnes (1280–1304).

Mint of Valenciennes.

		M	B.
Chautard No. 23	.	.	2
Chautard No. 24	.	.	2

One of the latter set has no dot after L.

Chautard No. 26	.	.	.	5
-----------------	---	---	---	---

These have all the unbarred π.

<i>Obv.</i> —As Chautard No. 26}			1
<i>Rev.</i> —As Chautard No. 23}	.	.	
<i>Obv.</i> —As Chautard No. 24}			1
<i>Rev.</i> —As Chautard No. 26}	.	.	

Mint of Mons.

Chautard No. 29	.	.	.	11
Chautard No. 33	.	.	.	1

Mint of Maubeuge.

Chautard No. 37	.	.	.	2	2.
Chautard No. 38	.	.	.	2	

NAMUR.

Gui de Dampierre (1263–1297).

Mint of Namur.

		M.
Chautard No. 49	.	1
Chautard No. 50	.	3

BRABANT.

Jean I (1261-1294).	M.
Chautard No. 95	12

Note, however, that all of these have *u*, not *N*.

Chautard No. 96	M. 9
Chautard No. 101	1

Here again *u* is used, not *N*.

LOOZ.

Arnould VIII (1280-1328).	M.
Chautard No. 144	5
<i>Obv.</i> —As Chautard No. 146 }	8
<i>Rev.</i> —As Chautard No. 147 }	
Chautard No. 147	7

These correspond to Chautard's plate more exactly than to his description, inasmuch as they show no annulets at the end of the obverse legend.

Variety of preceding	M. 2
--------------------------------	---------

These last have a single annulet between the two words that form the obverse legend, and a single annulet at the end.

Chautard No. 148	M. 5
----------------------------	---------

No roses are, however, visible in the hair of the king on any of these specimens, or on the following:—

Variety of preceding	M. 1
--------------------------------	---------

This has $\frac{x}{x}$ at end of obverse legend, as well as between the two words that go to form it.

CAMBRAI.

Guillaume de Hainaut (1292-1296).	M.
Chautard No. 209	1

This and the two following varieties have *u*, not *n* as given by Chautard.

Chautard No. 210	M.
	7
Doubtful variety	1

The stops between the words on the last specimen are obscure.

PORCIEN.

Gaucher de Châtillon (1303-1329).

<i>Mint of Yres.</i>	B.
Chautard No. 241	4
<i>Mint of Neuf-chateau.</i>	
Chautard No. 248	1

The correspondence with Chautard is not exact, as the coin reads *GALCS*, not *GALS* as given by him.

Finally, this appears to be the best place to describe what seems to be an imitation—probably executed abroad—of the early Edward I penny of Waterford without the triangle on the obverse (Variety *a*, *supra*, p. 111).

<i>Obv.</i> —EDW ~~AR~~ ANGL'DNSHYB}	B.
<i>Rev.</i> —CIVI T ~~AS~~ VTE ROP }	1

A glance over the list of foreign sterlings will show that they add little to what we have already learned

from the other coins as to the date of burial of the two hoards. Their value in this respect is corroborative merely. The time at which the Mellendean find was originally hidden can, I think, be determined almost exactly. The positive evidence suggested *circa* 1295-1300 (see *supra*, p. 88). But the negative evidence carries us farther. There is every reason to believe that the mint at Berwick was opened almost immediately after Edward I gained possession of the town in 1296. Is it conceivable that, if Berwick pennies had been in circulation before the Mellendean owner hid his money, there would have been none of them in a *cache* so rich in pieces struck at distant centres like London, Canterbury, and Bristol? The date for which we are in search cannot well be later than 1296. That, indeed, may have been the very year. After capturing Berwick, the "hammer of the Scots" marched northwards along the eastern side of Scotland, carrying destruction in his train, till he humbled Balliol once for all in the churchyard of Stracathro. What is more likely than that the motive of burial was the terror spread by the tidings of his advance? The Blackhills find does not admit of being 'placed' in quite so precise a fashion. At the same time it is possible to be fairly definite here also. The relatively large proportion of Bishop Beaumont's coins makes it certain that two or three years must have elapsed between 1317 and the act of concealment. This would bring us to *circa* 1320. And that cannot be very far wrong. In describing the Lochmaben hoard some years ago, I suggested as the date of deposit "three or four years on either side of 1325 A.D."¹⁵ The

¹⁵ *Num. Chron.*, 1905, p. 82.

two may have been hidden away contemporaneously. But the internal evidence contains some indications that point to the Blackhills find as being slightly earlier. John III of Brabant, for instance, is not represented in the latter, nor is John the Blind nor Henry VI, Duke of Lorraine, all of whom appeared at Lochmaben. I should say 1320, or within a year or two thereafter. The comparative scarcity of Foreign Sterlings at Blackhills must be attributed, in some measure at least, to the success of the vigorous efforts made by Edward I, about the beginning of the century, to drive them out of circulation.

GEORGE MACDONALD.

IV.

ARE THE COINS OF CHARLES I BEARING THE LETTERS :SA: CORRECTLY ASSIGNED TO A MINT AT SALISBURY?

THE present attribution of these half-crowns was first put forward by Mr. J. B. Bergne in 1848 (*Num. Chron.*, XII. 58-62), but the reasons for this proposal are somewhat nebulous, being chiefly based upon a passing visit by Charles to Salisbury in October, 1644. I observe that Hawkins does not refer at all to this attribution, and that the British Museum *Handbook* mentions it only in very general terms, omissions which suggest that the respective editors doubted the accuracy of Mr. Bergne's allocation to the Wiltshire city.

The history of the Civil War in that county affords little, if any, support to the theory that the course of events was such as to render probable the establishment of a mint during a Royalist or even during a Parliamentary occupation. On the contrary, Sir Richard C. Hoare in his *Modern Wiltshire* (1843) tells us that "to the open and unprotected state of the city the inhabitants may perhaps ascribe their exemption from the miseries of a siege with which so many other places were visited." Skirmishes of a more or less serious character were plentiful enough, but there was no prolonged defence by the troops of either party during the course of the war.

Nor does an examination of the coins furnish any link, as far as I can see, in the shape of a mint-mark derived from the charges on, or the supporters of, the armorial shield of the city, as was the case at Chester or Exeter or Worcester. Indeed, both the type and the fabric of all the examples are admittedly those of a coinage which has been identified with another town, viz. Weymouth. For these reasons it would appear that we must rely solely upon the presence of the letters SA if we seek to connect these pieces with Sarum or Salisbury, a somewhat unsafe foundation upon which to build when other evidence is not forthcoming.

If I can offer a more probable interpretation of the two letters, supported by collateral facts obtained from the coins themselves, I shall claim to have answered in the negative the question placed at the head of this note.

I will here recall the circumstance that the attribution to Weymouth of certain half-crowns showing a W between the feet of the horse was first made by the Rev. T. F. Dymock in 1856, cf. *Num Chron.*, N.S., Vol. I. p. 185 and Pl. VIII.

It is a matter of history that this Dorset town was occupied by the King's forces from a day in the first week in August, 1643, until June 17, 1644, a period of ten months or so, during which the facilities for landing reinforcements and for maintaining a packet service with France, caused the place to be regarded as of "huge consequence to his Majesty's affairs" (Dom. S P. Nov., 1643).

In February, 1644-5, a portion of the town was recaptured by the Royalists, but this second occupation was so short-lived as to render it unlikely that any money was then struck.

Now, upon the edge of a sea cliff nearly one mile south of Weymouth stand the crumbling ruins of Sandsfoot Castle, a Tudor fortress which was held for the King in 1643 and surrendered to his enemies in June, 1644, very shortly after the fall of the neighbouring town. As it was a royal castle, its governor had always been appointed by the Crown, and during the time when Charles's troops were in possession of Weymouth the respective garrisons were under one command.

To Sandsfoot Castle I propose to assign the SA half-crowns, relying for the most part upon the remarkable similarity between these coins and those of the same denomination with the letter W in the field of the obverse. As an instance of this affinity in type and fabric I would mention that one of the SA coins in the British Museum (classified by Hawkins, 3rd ed., among the “uncertain” half-crowns, Fig. 502) shows on the obverse the central type of Weymouth No. 4, and on the reverse the complete type of Weymouth No. 5. The points of resemblance between the SA and the W coins are not confined to the general type common to both classes, seeing that the mint-mark *Helmet* occurs on the reverses of each; this mark is not found, as far as I am aware, on any issues of the period other than those of Weymouth and the SA group. For further details, such as the distinctive chain border round the shields, I must be content to refer to Hawkins, pp. 333, 337, and 489.

In the event of my alternative attribution being regarded as acceptable, the transfer from Salisbury to Sandsfoot would almost necessarily include some half-crowns and smaller pieces which, although not bearing the letters SA, have been given to Salisbury on account

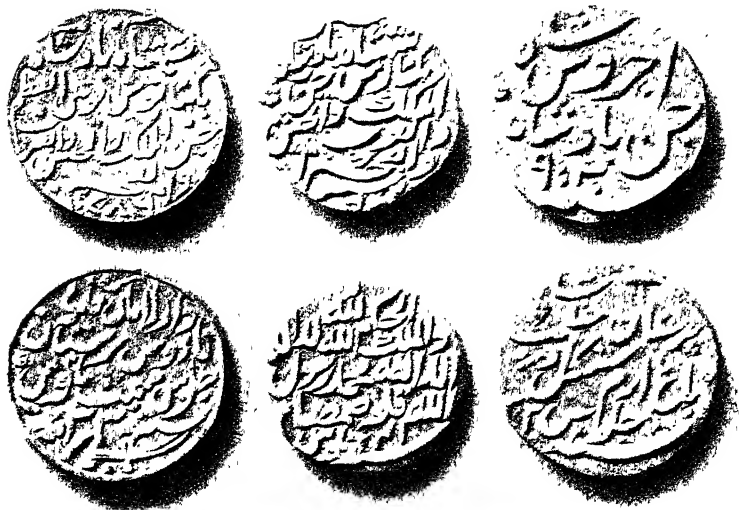
of their resemblance to what may be described as the parent type, viz. Hawkins, Fig. 502. One of the most noticeable of this class is a coin showing a doubtful object between the horse's feet, which has been spoken of as a cannon ball, but the circular impression may be the result of an attempt to erase the SA from the die, as, indeed, was suggested by Mr. Bergne. The close proximity of the two fortified positions tells against the probability that there were two separate mints, but it is conceivable that the military situation required the withdrawal of the workmen from the site first chosen.

After the surrender of Sandsfoot in June, 1644, Col. Wm. Ashburnham, the governor, retired to Portland Castle, some two miles distant across the roadstead, having previously sent there "the arms and other useful things." It is, therefore, not altogether improbable that the Weymouth and, if I am correct, the Sandsfoot dies were used at Portland until that castle was in turn yielded to the Parliament in April, 1646.

An incident which occurred at the capture of Weymouth is not without interest. When Prince Maurice took possession of the forts, harbour, and town in August, 1643, one of the vessels contained a quantity of silver plate, to a value exceeding £600, which was the property of the Government appointed by the Commons. Whether this bullion was eventually coined by the moneyers of the local mint remains, unfortunately, a very open question.

HENRY SYMONDS.

COINS IN THE NAME OF A KING OF JINNS.



BELIEF in the existence of Jinns or Genii is general amongst Moslems, and it is orthodox that it should be so for their Prophet Muhammad was a sincere believer in them. Chapter 72 of the Koran is called "Surah of the Jinns," and he tells of their creation from smokeless fire, of some tribes of them having been converted to the faith by his preaching, and makes other mentions of them.

The species is said to have been created some thousands of years before Adam. It consists, according to tradition, of five orders or classes, viz. *Jānn*, who are the most powerful of all, *Jinn*, *Shaitān*, *‘Efrit*, and *Marīd*. The last three are very powerful evil spirits, but there are both good and bad Jann and Jinn. The word Jinn is, however, commonly used for all the orders, including good and bad, and sometimes *Shaitān* and *Efrit* are used for any evil ones, and good Jinns are often spoken of as Paris, though that term more often indicates females only.

The Jinns are generally peaceable; they eat and drink and propagate their species sometimes in conjunction with human beings; they are of various forms, such as snakes, lions, wolves, scorpions, &c., as well as the human form; they can change their forms and make themselves visible or invisible at their pleasure. If they are good they are very handsome, if evil horribly hideous. Their chief abode is in a mountain called *Kaf*, which is supposed to compass the whole earth; they resort much to junctions of roads, rivers and seas, ruined houses, baths, wells, ovens, &c. Some are good Moslems, others infidels. By means of Talismans and certain invocations men are said to obtain the services of Jinns. No one ever had such absolute power over them as had King Solomon, son of David, who made them help him to build the Temple, and whose seal in the form of two interlaced triangles is now so much used as a charm. There are, it is said, forty troops of them, each troop consisting of 500,000. Their great king is Malik Katshān, and the troops are ruled over by princes.

But it is curious and somewhat of a novelty to find coins or medals struck in the name of a Prince of Jinns

as is the case in the three now described. No. 1 belongs to Mr. W. H. Valentine, who acquired it together with a lot of Oriental copper without knowledge of where it was collected. It has evidently been gilt at one time and is probably of Persian fabric. Nos. 2 and 3 are in the British Museum and both of copper. The readings of the legends have not been easy and are not yet quite satisfactory, but Sir Albert Houtum-Schindler and Dr. Denison Ross have both puzzled over them with me, and this is the best we have arrived at.

No. 1. <i>Obv.</i>	<i>Rev.</i>
شهنشاه بادشاه	دار لاماں قلعه
بکتانوس یوس العظم	ناؤس پرستان
جن الملك والجيش والعرب	جلوس میمنت مانوس
ولعجم	سنة ۳۳
۷۸۶	

Four-leaved star and Zū-l-fakār sword below on reverse.

No. 2. <i>Obv.</i>	<i>Rev.</i>
شهنشان بادشاه	الحکمر لله
بکتانوس جن	والملك لله لا اله
الملك والجيش	الا الله محمد رسول
والعرب	الله قلعه صمصام
والعجم	۱۴ جلوس
سنة	سنة
۹۸۳	

Six-leaved star after جن and conical umbrella above م of العجم on obverse.

A note in Burton's translation of the *Arabian Nights* (vol. iii. p. 225) states—"Baktānūs is Lord of three Moslem troops of Wandering Jinns, which number a total of twelve bands and extend from Sind to Europe." In the *Shams al-Lughat* Dictionary the name is given as

that of "a Pari of a timid or retiring disposition." Perhaps this may be the reason for the use of the term *يوس العظم*, "despairing of greatness," on No. 1, if there be any reason for it beyond the jingle of words to make up a poor couplet ending in *العظم* and *العجم*. The religious phrases and Kalimah on No. 2 show that he is an orthodox Moslem.

No. 3. *Obv.*

شاه
اجروس
جن بادشاه
۹:۳
سنه

Rev.

ت
پریستان جنا
سنگل دیب
باغ ارم
جلوس ۳۲
سنه

Conical umbrella above پریستان

The general appearance and lettering of this coin are different to that of the previous ones, and the fabric is probably Indian.

I have not yet been able to find a reference or to hear anything about Ajarūs; the termination of the name in "ūs," however, according to Burton, indicates that he is a Moslem Jinn. The reverse legend has been a good deal puzzled over, but the following reading by Mr. R. B. Whitehead seems to me to be right except that پریستان appears to be the word as on the other coin and not پریستان—

باغ ارم سنگل دیب پریستان جنات سنه جلوس ۳۲

Shah Ajarūs Jinn Badshah of the Garden of Iram, Ceylon Isle and Fairyland's Gardens.

The dates on all the coins are fanciful (786–982 A.H.). The pieces are comparatively modern, not older probably than a hundred years or so, and the regnal years are also

imaginary. The phrase on No. 1, جلوس میمنت مانوس, "in the year of his tranquil prosperity," appears first on the coins of Aurangzib the Delhi Emperor, 1069–1108 A.H. (1658–1696 A.D.), and is common on coins of his successors up to and including the E. I. C. It appears also on the coins of some of the Shahs of Persia after 1725 A.D.

The names of the places of issue or otherwise are of course fanciful. "The Fort of Safety, the Fire Temple of the Worshippers" on No. 1, and "The Fort of the Sword" on No. 2, seem to have no connexion with Fairyland, but that is not so with regard to No. 3, for the Bāgh Iram is described in Johnson's *Persian, Arabic, and English Dictionary* as "celebrated but fabulous gardens, said to have been anciently made in Arabia Felix by a king named Shaddād bin Aad or Iram bin Omad. Frequent mention is made of these gardens by the Eastern poets, who describe them as a perfect model of the voluptuous paradise which the Muhammadans are promised by their prophet." *Sangaldib*, "The Isle of Sangal or the Sangals," I have not found as a word for Ceylon, but it seems not an improbable variant from the Persian *Sarandīb* and the Sanskrit *Sinhala-dvīpa*, that island, together with *Bagh Iram*, being, as one might expect, the gardens of the Paris or Fairies.

Sir A. Houtum-Schindler tells me that he has never seen such coins as these in Persia, but with reference to No. 1 says, "Perhaps it has some connexion with the following story, a true one, which I have many times heard from the descendants of the Prince and others.

"A son of Fath 'Alī Shāh, Shaikh 'Alī Mīrzā,¹

¹ Shaikh ul-Mulūk was born 1796 and died 1846. He had 60 sons

surnamed Shaikh ul-Mulūk and many years governor of Malāyir,² was a great voluptuary and, probably in consequence of excesses, feeble minded. A clever adventurer took advantage of this fact and, presenting himself as an emissary and agent of the King of the fairies, promised to bring a daughter of that King if the Prince would send the customary presents. He, the emissary, would deliver the presents to the King. Prince Shaikh ul-Mulūk did not quite believe this fairy-tale and asked for some proof of the existence of the King and his daughter, and also of the King's willingness to give him the daughter in marriage. After an absence of some days the rascal brought a letter which he said the King of the fairies had written *and some coins*. In the letter the King confirmed what the 'agent' had said, and solemnly promised that his daughter would meet the Prince in a secluded valley in the neighbouring hills during the fourth night after the delivery of the specified number of gold coins and precious stones to his agent. The coins bore the name and titles of the King of the Jinns and were brought in order to show that he possessed the right of coinage, a prerogative of reigning kings. The Prince then believed everything and gave the gold and jewels. During the appointed night he rode to the indicated valley and waited there until sunrise—in vain; the girl did not appear. The Prince returned to his palace and was the laughing-stock of his people for many years after. Of

and 52 daughters; 26 of the former and 21 of the latter survived him. He was governor of Malāyir 1809-1836.

² Malāyir is a little province south of Hamadan. Its capital is Daulatābād, formerly called Chūmīn. It received its new name in the beginning of the nineteenth century from Muḥammad 'Alī Mirzā, surnamed Daulat Shāh (eldest son of Faṭḥ 'Alī Shāh), who built a palace there and embellished the place with gardens, &c.

course, the agent of the King of the Jinns was not seen again. The Prince was dismissed from his governorship soon after. Prince Īraj Mīrzā, a brother of his, wrote³—‘he lost his locks over the affair of the daughter of the Shāh of the Fairies’ شاه پریان.”

One cannot say that this piece was one of those given to the Prince, the gilding on it and the probable date of its making are in favour of its being so, but at any rate the story shows the use to which such fairy coins are put and a reason for their fabrication.

OLIVER CODRINGTON.

³ Private manuscript.

MISCELLANEA.

COUNTERMARKING OF BASE TESTOONS.—I am indebted to Mr. Charles ffoulkes for the following extract from the Records of the Armourers' Company (Armourers' Company, Court Book, 2, fol. 40, *anno* 1560): "1560. Hammermen from the Armourers' Company were sent 2 to the Clothworkers' Hall, 2 to the Sessions Hall, Southwark, and 2 to the Merchant Tailors' Hall, to strike and stamp with portcullis and greyhound the several pieces of money called 'Testons,' there to continue until the end of 14 days from the date of precept" (see C. ffoulkes, *The Armourer and his Craft*, p. 123). This extract is an interesting supplement to the proclamation of October 9, 1560, ordering the portcullis and greyhound to be struck on the base testoons current at fourpence halfpenny and twopence farthing respectively (see Ruding's *Annals*, 3rd ed., vol. i. p. 337).

G. C. B.

NOTICE OF RECENT PUBLICATION.

Manuel de Numismatique Française. A. Blanchet and A. Dieudonné. Vol. I.: *Monnaies frappées en Gaule depuis les origines jusqu'à Hugues Capet.* A. Blanchet.

IN his brief introduction Monsieur Blanchet expresses the hope that this volume will serve the double purpose of a useful handbook for more advanced students (*ceux qui savent déjà*) and a primer for beginners (*ceux qui veulent étudier*). This twofold object is borne in mind by the author throughout his work, and adds difficulty to the very difficult task of compressing into a volume of 400 pages a description of the coinage of his country in the pre-Roman, Roman, Merovingian, and Carolingian periods. The chief requirement of the beginner is lucid instruction in broad outlines of such of the

more important features and difficulties as the origin of the coinages, the chronological or geographical meaning of their divergence from the originals in type and standard, the evidential value of the finds, &c.; the more advanced student, on the contrary, will require detail in as condensed a form as possible, in fact in tabular form for preference, which may act as a time-saving intermediary by means of reference to the more complete information to be found in the standard works, assuming that the subjects, as is here the case, are already more fully treated in trustworthy books. It is interesting to see how M. Blanchet prepares his volume to serve two masters of such contrary tastes.

A very large portion of the small available space is occupied by tables, which afford excellent food for the student, but must be dry bones for the beginner. The first of these, the list of inscriptions on Gaulish coins, is the shortest; it is, as one would expect, an abridgment of the excellent list in the same author's *Traité des Monnaies Gauloises*, but as the abridgment takes the form of omitting the references which make that list so useful, its utility to the student is much impaired. In the Roman series he gives lists of (1) reverse inscriptions and (2) symbols on coins of the Roman Emperors in Gaul, (3) reverse inscriptions on coins from the reign of Aurelian to the end of the empire, under each of which are inserted the mint-marks found in combination with it, (4) a list of emperors whose coins bear Gallic mint-marks. The Merovingian period contains a combined list of names of places and moneyers and a list of moneyers of uncertain locality; in both of these additions are made to the lists previously published in the same author's *Numismatique du Moyen Age et Moderne*; the Carolingian mints which appeared in modern French form in the work just mentioned are now given in their original spellings, and additions are made to them and also to the alphabetical list of reverse inscriptions which is here reproduced. In the little space that is left the descriptive material is well illustrated with several good line-blocks in addition to three photographic plates at the end of the volume. Each period contains a brief account, so far as is necessary and possible, of the origin of the currency, the development of the types chronologically and locally, the debasement or variation of the metallic standard, the organizations of mints, &c. The brevity of this portion of the work may be inferred from the fact that only 240 pages are left to it and these contain figures of 248 coins; but ample references are supplied in footnotes, and the author shows excellent taste in the fair way in which he lays before the reader both

sides of all disputable points, as for example in the doubtful question of the restoration of the imperial power in Gaul by Maurice Tiberius. Subject is given for the serious consideration of metrologists in the new evidence brought to bear on the question of the introduction of the pound of sixteen ounces by Charlemagne, which may well explain the difficulty of the apparent light weight of the deniers of his reign. A serviceable index completes the volume.

Though the use of this handbook is lessened for the beginner by the author's devotion to the student, and for the student by the abridgment necessary in a work of this kind, there remains an intermediate class to whose requirements it seems to be excellently suited, namely the collector—that is, the collector who studies the subject from the point of view of collecting as opposed to the collector who, collecting from the point of view of studying the subject, is identical with the student; the collector requires just such a volume as this, comprising much in little space, and yet giving long tables that will greatly assist him in his work of identification.

G. C. B.

VI.

THE COINS OF HIERAPOLIS IN PHRYGIA.

(Continued from p. 30.)

XVI. HYGIEIA (cf. ASKLEPIOS).

1. *Obv.*—ΑΑΙΡ l., ΒΗΝΟC r. Bust of Lairbenos radiate ; shoulders draped. Border of dots.

Rev.—ΙΕΡΑΠΟΛΕ l., ΙΤ ΩΝ r. Hygieia, wearing kalathos, seated on throne l., holding in r. phiale towards serpent erect before her, and resting l. arm on round cushion ; behind the goddess is Telesphoros to front on a stool or shelf. Border of dots.

B. M., 57 (Pl. xxx. 6) ; Paris, 570 ; Vienna, 19867 ; cf. also Mionnet, iv. 588–9, where the goddess is wrongly described as Kybele. On the distinguishing features in the representations of Hygieia and Kybele, cf. Imhoof-Blumer, *Kl. M.*, 8 ; *Philolog.*, lxix. 199.

2. *Obv.*—Similar.

Rev.—ΙΕΡΑΠΟΛΕΙΤ l., ΩΝ r. Hygieia, with Telesphoros, as before. Border of dots.

B. M., 58 ; Imhoof (present collection), *Kl. M.*, 8 (Pl. vii. 31) [**Pl. III. 38**].

3. *Obv.*—Similar. Border of dots.

Rev.—ΙΕΡΑΠΟΛ l., ΕΙΤ ΩΝ r. Similar. Border of dots.

Paris, 571 ; Vienna, 27707.

4. *Obv.*—Similar. Border of dots.

Rev.—ΙΕΡΑΠΟΛΕ l., ΙΤΩ Ν r. Similar. Border of dots.
Berlin, 67; Vienna, 19867; Gotha. The
obverses of Nos. 1-4 are from the same die.

5. *Obv.*—ΛΑΙΡ l., ΒΗΝΟC r. Similar. Border of dots.

Rev.—ΙΕΡΑΠΟ l., ΛΕΙΤΩΝ r. Hygieia with Telesphoros;
the throne has a low, barred back; Telesphoros standing in the air. Border of dots.

Berlin, 76. The obverse is from the same die as the alliance coins, with the figure of Lairbenos; cf. B. M., 59. The coin therefore belongs to the time of Philippus (cf. *Journ. intern. d'archéol. numism.*, xiv. 1912, p. 100). The figure of Telesphoros added in a quite schematic manner (cf. also *Kl. M.*, 9, 10) also points to this late period.

6. *Obv.*—Similar.

Rev.—ΙΕΡΑΠΟ l., ΛΕΙΤΩΝ r. The same group as preceding, but not from the same die.

Berlin, 75; Paris, 571a; Gotha. The coins of this type belong to the time of Philippus, as their obverse dies are identical with those of 5.

7. *Obv.*—(ΛΑΙΡΒΗΝΟC).

Rev.—ΙΕΡΑΠΟ l., ΛΕΙΤΩΝ r. The same group; high back on the throne of Hygieia. Border of dots.

Copenhagen, 62. Two other specimens with similar types are *Kl. M.*, 9, 10 (of the third century). The type of Lairbenos on their obverses allocates them to Hierapolis, and it is the only place in Phrygia where he is found. On the form ΙΕΡΟΠΟΛΙC, cf. *Philolog.*, lxi. 232.

8. *Obv.*—ΙΕΡΑCΥ l., ΝΚΛΗΤΟC r. Bust of young Senate, bareheaded; shoulders draped. Border of dots.

Rev.—ΙΕΡΑΠΟΛ l., ΕΙΤΩΝΝΕΩΚ ΟΡ r. and below, ΩΝ in field l.; as before: Hygieia leaning l. arm on a cushion. Border of dots.

B. M., 86 ; Berlin, 74 ; Vienna, 27676. The coins belong to the third century, or, to be more exact, to the time of Philippus (cf. *Kl. M.*, 10). The alliance coins with the similar type of the Senate on the obverse (cf. *Journ. intern. d'archéol numism.*, xiv. 1912, p. 100) are also of this period: the two groups have common dies (e.g. B. M. 83-89). So have Type II. 12 ; XIV. 7, 8, &c.

9. *Obv.*—Similar.

Rev.—ΙΕΡΑΠΟΛΕΙ l., ΤΩΝΝΕΩ K r., OP in exergue, ΩΝ in field l. : as before. Border of dots.

Paris, 577 = Mionnet, iv. 597.

10. *Obv.*—Similar.

Rev.—ΙΕΡΑΠΟΛ l., ΕΙΤΩΝΝΕΩΚ r., OP in exergue, ΩΝ in field l. Similar. Border of dots.

Copenhagen, 26.

11. *Obv.*—Bust of Artemis, laureate ; quiver on shoulder ; branch before breast ; shoulders draped. Border of dots.

Rev.—ΙΕΡΑΠΟΛ l., ΕΙΤΩ Ν r. : similar. Border of dots.

Berlin, 59, 60 [Pl. III. 39] ; *Inv. Wadd.*, 6101.

12. *Obv.*—ΑΡΧΗΓΕ r., ΤΗΘ l. Bust of Apollo, lyre at breast ; shoulders draped. Border of dots.

Rev.—ΙΕΡΑ r., [ΠΟΛΕΙΤ]ΩΝ l. Hygieia seated l. on high-backed throne, holding phiale to a serpent erect before her, and resting l. elbow on round cushion. Border of dots.

Inv. Wadd., 6104 [Pl. III. 40]. The obverse type, which occurs fairly frequently on the coins of the city, is always from the same die. Cf. B. M., 34 (46 is different) ; *Inv. Wadd.*, 6103, &c. ; on another Archegetes type cf. XIV. 1-4.

13. *Obv.*—Otacilia Severa.

Rev.—ΙΕΡ ΑΠΟΛ Ι., ΕΙΤΩΝ r.: as before. Border of dots.

B. M., 153 (Pl. xxxii. 4), 154; Paris, 607 = Mionnet, iv. 644; Berlin, 187; cf. Mionnet, iv. 634 (*obv.* Elagabalus from Vaillant, *Num. Gr.*), 636 (*obv.* do.), 642 (*obv.* Philippus I?).

14. *Obv.*—Similar.

Rev.—ΙΕ ΡΑΠΟ Ι., ΛΕΙΤΩΝ r. Similar. Border of dots.

Vienna, 33669. Variant of the preceding type.

15. *Obv.*—Similar.

Rev.—ΙΕΡ Ι., ΑΠΟΛΕΙΤ r., ΩΝ in exergue. Similar. Border of dots.

Berlin, 186.

16. *Obv.*—Crispina.

Rev.—ΙΕΡΑΠΟ r., ΛΕΙΤΩΝ Ι. Hygieia standing r., feeding a serpent. Border of dots.

Paris, 600a [Pl. III. 41]. On Hygieia at Hierapolis, see under Asklepios.

XVII. ISIS (cf. SARAPIS).

Obv.—ΔΗ Ι., ΜΟC r. Head of young Demos, with taenia. Border of dots.

Rev.—ΙΕΡΑΠΟ Ι., ΛΕΙΤΩΝ r. Isis standing l., holding sistrum in uplifted r. hand and situla in lowered l. Border of dots.

Berlin, 87 [Pl. III. 42].

XVIII. KYBELE.

1. *Obv.*—Trajan.

Rev.—ΙΕΡΑΠ[Ο] r., ΛΕΙΤΩΝ l. Kybele seated l. on throne, holding in r. phiale, leaning l. arm on cushion; lion at her feet. Border of dots.

B. M., 131; Berlin, 153; the *B.M. Cat.* describes the object on which her l. arm rests as a tympanum, but it is clearly a cushion. K. is represented as a goddess of healing, very like Hygieia, as the phiale also shows. The lion alone shows that it is Kybele who is here represented. Cf. also Imhoof-Blumer, *Kl. M.*, 8.

2. *Obv.*—Similar.

Rev.—ΙΕΡΑ r., ΠΟΛΕΙΤΩΝ l. Similar. Border of dots. Copenhagen, 40. Variant of the preceding.

3. *Obv.*—M. Aurelius,

Rev.—ΙΕΡΑΠΟ l., ΛΕΙΤΩΝ r. Kybele standing, with kalathos, to front, with her hands on the heads of two lions lying at her feet. Border of dots.

Museum Winterthur = Imhoof-Blumer, *Z. gr. u. röm. Münzk.*, p. 153, 8 (Pl. III. 43]. This Kybele type frequently appears on the coins of Asia Minor; cf. Imhoof-Blumer, *loc. cit.*

4. *Obv.*—Elagabalus.

Rev.—ΙΕΡΟΠΟ l., ΛΕΙΤΩΝ r. Kybele, as on 1 and 2. Border of dots.

Copenhagen, 57. For other coins with similar Kybele types, cf. *Philolog.*, lxxix. 248. On coins of this class Kybele is represented as a goddess of healing, similar to Hygieia.

5. *Obv.*—ΑΥΤ ΚΑΙ ΜΑ[Ρ] l., ΑΥ ΑΝΤΩΝΕΙΝ/ΟC r. Bust of Caracalla, bearded, in cuirass and paludamentum.

Rev.—ΙΕΡΟΠ l., ΟΛΕΙΤΩ r., Ν in exergue. Kybele seated l. between two lions, phiale in r., the fingers of the l. hand on tympanum (more correctly, cushion).

Imhoof-Blumer (present collection) = *Z. gr. u. röm. Münzk.*, p. 153. The coin which is there ascribed to Hieropolis ought probably to be attributed to the town on the Lykos.

6. *Obv.*—Severus Alexander.

Rev.—ΙΕΡΟΠΟΛΕΙΤΩΝ. Cybele assise entre deux lions, tenant dans la main droite une patère et dans la gauche le crotalum ?

Mionnet, iv. 639 (from Vaillant, *Num. graeca*). The description is probably on the whole correct, as it is corroborated by a similar coin in Athens ; only it is a cushion rather than a tympanum (crotalum) on which the goddess rests her l. arm.

XIX. MÊN.

1. *Obv.*—ΣΕΥC l., ΤΡΩΙΟC r. Head of Zeus Troios, bound with taenia. Border of dots.

Rev.—ΙΕΡΑΠΟΛ l., ΕΙΤΩΝ r. Mên with Phrygian cap, chiton, and cloak, standing l., placing the r. foot on a bull's head ; in r. pine cone, l. on sceptre. Border of dots.

Berlin, 16 [Pl. III. 44] ; Vienna, 19858. The type of the obverse differs from all other types of Zeus Troios.

2. *Obv.*—ΙΕΡΑ l., ΒΟΥΛΗ r. Bust of Boule, laureate and veiled. Border of dots.

Rev.—ΙΕΡΑΠΟΛ l., ΕΙΤΩΝ r. Similar. Border of dots.

B. M., 90 ; Berlin, 95 [Pl. III. 45], 96. The type of the reverse differs from that of the preceding coin.

3. *Obv.*—Similar. Border of dots.

Rev.—ΙΕΡΑ ΠΟ l., Λ ΕΙΤΩΝ r. Similar. Border of dots.

B. M., 91 ; Berlin, 17. The obverses of types 2 and 3 are from the same die.

4. *Obv.*—ΝΕΩ l., ΚΟΡΩΝ r. Bust of city-goddess with turreted crown and veil. Border of dots.

Rev.—ΙΕΡΑΠ Ο l., ΛΕΙΤΩΝ r. Similar. Border of dots.
B. M., 92 ; Paris, 575.

5. *Obv.*—Similar. Border of dots.

Rev.—ΙΕΡΑΠΟΛ l., ΕΙΤΩΝ r. Similar. Border of dots.
Berlin, 98 ; Copenhagen, 22 ; Gotha ; Vienna, 19861 = Mionnet, iv. 603. The obverses are from the same die as the two preceding coins, the reverses as the specimens of No. 1.

- 5A. *Obv.*—ΔΗΜΟC. Tête jeune diadémée du Peuple.

Rev.—ΙΕΡΑΠΟΛΕΙΤΩΝ. Le dieu Lunus debout (*i.e.*, Mên), le pied gauche posé sur un rocher, tenant dans la main gauche une pomme de pin, la droite appuyée sur la haste.

Mionnet, iv. 594. The description is inaccurate, but this may be a distinct type.

6. *Obv.*—Caracalla (?) Elagabalus (?).

Rev.—ΙΕΡΑΠ ΟΛ l., ΕΙΤΩΝΝΕΩ r., in field Κ/Ο l., ΡΩΝ r. Similar. Border of dots.

B. M., 143, 144 ; Berlin, 175 ; cf. also Leake, p. 67.

7. *Obv.*—Elagabalus (?) Caracalla (?).

Rev.—ΙΕΡΑΠΟ ΛΕΙ l., ΤΩΝΝΕΩΚΟ r., ΡΩΝ in field r. Similar. Border of dots.

Gotha. Variant of the preceding.

On Mên in Hierapolis, cf. *Philolog.*, lxi. 193.

XX. MOPSOS AND TORREBOS.

Obv.—ΙΕΡΑΠΟ r., ΛΕΙΤΩΝ l. Bust of Apollo with lyre at breast, shoulders draped. Border of dots.

Rev.—ΜΟΨΟΣ l., ΤΟΡΡΗΒΟΣ r. Mopsos and Torrebos standing face to face, youthful figures naked but for long mantle hanging down back. Mopsos to r., holding laurel branch in lowered r., leans l. on bow; Torrebos to l., holds on extended r. statue of a goddess (city-goddess with turreted crown?) and leans l. arm on a lyre which stands on a basis behind him. Border of dots.

B. M., 32 (Pl. xxix. 9); Berlin, 21 [Pl. III. 46] = *Kl. M.*, 5 (Pl. vii. 29); *Inv. Wadd.*, 6114. The specimen mentioned by Imhoof-Blumer (*loc. cit.*) as in the Laborde Coll. is probably identical with *Inv. Wadd.*, 6114.

That all these coins are from the same die may not only be assumed from the rarity of the type, but is confirmed by a comparison of the individual specimens. Imhoof-Blumer read the name on the specimen formerly in his collection and now in Berlin as ΤΟΡΡΗΒΟΣ, but a more careful examination of a cast of this coin and of one of the Paris specimen (in spite of its poor preservation), shows that on these two specimens the name is written with B. In the light of this discovery we must correct the statement in *Philologus*, lxi. 195. The fourth specimen mentioned there (Head¹, 565) is of course the British Museum specimen. A representation of the two heroes is not found anywhere else on Phrygian coins. Whether one of the two, more probably Torrebos, had some special connexion with Hierapolis, cannot now be ascertained. For a "Lydian" legend of Torrebos, the reader is referred to *Philologus*, lxi. 196.

XXI. NEMESIS.

1. *Obv.*—Bust of Apollo-Lairbenos, radiate; shoulders draped. Border of dots.

Rev.—ΙΕΡΑΠΟ l., ΛΕΙΤΩΝ r. Winged Nemesis standing l., with r. plucking chiton at breast, holding bridle in l. Border of dots.

B. M., 18; Berlin, 29, 30; Paris, 561; *Inv. Wadd.*, 6105; Athens; Copenhagen, 4; Vienna, 30919; presumably also Leake, p. 66 (*obv.*, youthful radiate head to r.; *rev.*, winged female, standing to l.).

2. *Obv.*—Bust of Selene or Hekate, rising from crescent, with hair bound above and behind, and dress. Border of dots.

Rev.—ΙΕΡΑΠΟΛ l., ΕΙΤΩΝ r. Similar. Border of dots.

B. M., 19 (Pl. xxix. 7); Berlin, 52; *Inv. Wadd.*, 6099 (Pl. xvi. 19); Copenhagen, 6; Vienna, 33667.

3. *Obv.*—Similar. Border of dots.

Rev.—ΙΕΡΑΠΟΛΕ l., ΙΤΩΝ r. Similar. Border of dots.

Berlin, 51 [Pl. III. 47]; Gotha; The Hague. Variant of the preceding type.

4. *Obv.*—Similar. Border of dots.

Rev.—ΙΕΡΑΠΟ r., ΛΕΙΤΩΝ l. Similar. Border of dots.

Berlin, 53.

5. *Obv.*—Similar. Border of dots.

Rev.—ΙΕΡΑΠ r., ΟΛΕΙΤΩΝ l. Similar. Border of dots.

Copenhagen. The obverses of Nos. 2–5 from the same die. Cf. also Mionnet, *Suppl.*, vii. 364.

6. *Obv.*—ΙΕΡΑΠΟ r., ΛΙC l. Bust of city-goddess with stephane; shoulders draped. Border of dots.

Rev.—ΙΕΡΑΠΟ l., [Λ]ΕΙΤΩΝ r. Winged Nemesis, standing r., as above. Border of dots.

B. M., 20; *Inv. Wadd.*, 6116 (Pl. xvi. 22).

7. *Obv.*—Similar. Border of dots.

Rev.—ΙΕΡΑΠ l., ΟΛΕΙΤΩΝ r. Winged Nemesis, standing r., as above. Border of dots.

Berlin, 9 [Pl. III. 48] = *Gr. M.*, 738, 692 (Pl. xii. 18). The obverses of Nos. 6 and 7 are from the same die.

8. *Obv.*—Head of bearded Herakles. Border of dots.

Rev.—ΙΕΡΑΠΟ l., ΛΕΙΤΩΝ r. Winged Nemesis as in Nos. 1-5. Border of dots.

Paris, 562 = Mionnet, iv. 581; Berlin, 27, 28; Copenhagen, 3 = Ramus 4 (?); Vienna, 31399; cf. Leake, *Suppl.*, p. 58.

9. ΛΑΙΡ l., ΒΗΝΟC r. Bust of Lairbenos radiate; shoulders draped. Border of dots.

Rev.—ΙΕΡΑΠΟ l., ΛΕΙΤΩΝ r. Winged Nemesis, standing l., scales in r., in l. cubit-rule, wheel behind her at feet. Border of dots.

B. M., 62; Berlin, 68 [Pl. III. 49]; Vienna, 19869. Time of Philippus; cf. No. 11.

10. *Obv.*—Otacilia Severa.

Rev.—ΙΕΡΑΠΟΛΕ l., ΙΤΩΝ r. Nemesis, as on Nos. 1-5. Border of dots.

Munich. The reverse from the same die as type 3.

11. *Obv.*—ΜΙΟΥΛΦΙΛΙΠΠΟC . ΚΑΙ. Bust of Philippus the younger, not laureate, with cuirass and paludamentum. Border of dots.

Rev.—ΙΕΡΑΠΟ l., ΛΕΙΤΩΝ r. From the same reverse die as No. 9.

St. Petersburg

XXII. NIKE

1. *Obv.*—BOY r, ΛΗ l. Bust of Boule, laureate and veiled. Border of dots.

Rev—ΙΕΡΑΠ Ο l., ΛΕΙΤΩΝ r. Nike, advancing l., in l. palm, wreath in uplifted r. hand. Border of dots.

B. M., 76; *Inv. Wadd.*, 6122; Munich, 11.
Cf. also Mionnet, iv. 602.

2. *Obv.*—Similar. Border of dots.

Rev.—ΙΕΡΑΠΟ l., ΛΕΙΤΩΝ r. Similar. Border of dots.

Berlin, 93; Vienna, 31394. A later specimen, of the time of Philip (Berlin, 92: *obv.* counter-marked with a deity) has a similar reverse, which is not, however, from the same die. The obverses of both are from the same die.

XXIII. PLUTO.

1. *Obv.*—BOYΛΗ in straight line r. Bust of Boule with stephane and veil.

Rev.—ΙΕΡΑΠΟΛΕΙ ΤΩΝ r. Rape of Persephone by Pluto, driving to r. in quadriga with galloping horses. Border of dots.

Vienna, 19873. The obverse from the same die as II. 13.

2. *Obv.*—ΙΕΡΑΠΟ r., ΛΙC l. Bust of city-goddess with long hair tied on top and behind; shoulders draped.

Rev.—ΙΕΡΑΠΟΛ below, [Ε]ΙΤΩΝ r. Rape of Persephone by Pluto, holding a sceptre in l. and driving as before.

Paris, 566 [Pl. III. 50].

3. *Obv.*—ΙΕΡΑΠΟΛΕΙ r., ΤΩΝ l. Head of young Dionysos,¹ bound with ivy. Border of dots.

Rev.—Rape of Persephone by Pluto, in fluttering chlamys, with sceptre in l., driving as before. Border of dots.

B. M., 38 (Pl. xxix. 12); Berlin, 18, 19; Paris, 568 = Mionnet, iv. 586 = *Suppl.*, vii. 368; Munich, 2; Copenhagen, 1 (= Ramus, 5); Dresden; University of Bologna [Pl. III. 51].

4. *Obv.*—ΙΕΡΑCV l., ΝΚΛΗΤΟC r. Bust of young male Senate, laureate; shoulders draped. Border of dots.

Rev.—ΙΕΡΑ l., Π ΟΛΕ above, ΙΤΩΝ r., ΝΕΩΚΟ in exergue, ΡΩΝ in field r. Similar. Border of dots.

B. M., 87 (Pl. xxx. 10), 88; Berlin, 97.

5. *Obv.*—Nero.

Rev.—Μ. ΣΥΙΛΛΙΟC[ΑΝΤΙΟΧΟC] below and r., [ΙΕΡΑ]ΠΟΛΙ above and l., ΤΩΝ in field. Similar, but Pluto in biga.

Paris, 594.

6. *Obv.*—ΝΕΡΩΝ l., ΚΑΙΣΑΡ r. Head of young Nero.

Rev.—ΙΕΡΑΠΟΛΕΙ ΤΩΝΛΑΕΡΤΗΣΝΕΩΤΕΡΟC. Similar.

Imhoof-Blumer (present collection). The magistrate's name is probably the same as that incompletely preserved on a coin of Agrippina (B. M., 127. Cf. *Χάριτες*, p. 489).

7. *Obv.*—Nero.

Rev.—[Ρ ΕΛΟΥΙΟC (?)] ΟΠΤΟΜΟC ΙΕΡΑΠΟΛΕΙΤ ΩΝ. Similar.

Munich.

¹ *Obv.*—ΙΕΡΑΠΟΛΕΙΤΩΝ. Head of Apollo to r.

Rev.—Pluto in quadriga to r., carrying off Persephone.

Leake, *A Supplement to Numismata Hellenica*, p. 58. As this type has not been found elsewhere on coins of Hierapolis, Leake may have made a mistake. The head on the obverse is in all probability Dionysos.

8. *Obv.*—Caracalla.

Rev.—ΙΕ Ρ Ι., ΑΠΟ above, [ΛΕ] r., ΙΤΩΝΝΕΩΚΟ
ΡΩΝ in ex-
ergue. Rape of Persephone as above; below
the horses are a serpent and an overturned
basket. Border of dots.

Berlin, 165 [Pl. IV. 52].

9. *Obv.*—Caracalla.

Rev.—ΙΕ Ρ Ι., Α ΠΟΛΕ above, [ΙΤΩΝ] r., ΝΕΩΚΟΡΩΝ in
exergue. Rape of Persephone as above; under
the horses an overturned basket and serpent;
flowers in front.

Copenhagen, 44 (= Ramus, 8 = Mionnet,
Suppl., vii. 394).

10. *Obv.*—Otacilia Severa.

Rev.—ΙΕΡΑ above, ΠΟ r., ΛΕΙΤΩΝ in exergue. Similar,
but without serpent, &c. Border of dots.

B. M., 155; Gotha.

In Phrygia we only find the rape of Persephone at Hierapolis. Its frequent occurrence as a coin-type here cannot, therefore, be purely accidental, and is explained by the Charoneion in the centre of the old town, in which the cult of Kybele also was localized, and to which the town owes its origin.

XXIV. POSEIDON.

1. *Obv.*—ΔΗΜΟC r. Head of Demos bearded, not laureate.
Border of dots.

Rev.—ΙΕΡΟΠΟ Ι., ΛΕΙΤΩΝ r. Poseidon naked r., with l.
foot on the prow of a ship (indistinct), and
dolphin in lowered r. hand, the l. holding trident.
Border of dots.

Copenhagen = Ramus, 7 (Pl. vii. 9) = Mionnet,
Suppl., vii. 372 [Pl. IV. 53].

The spelling with o is not an argument against the attribution to Hierapolis (cf. *Philolog.*, lxi. 232). In support of this Ramus quotes the coin described in Raschius, *Suppl. Laevici Nummarii*, tom. ii. p. 1392, ex Museo Wakiano, which is identical with the specimen mentioned by Gessner (see below). He also refers to Eckhel, *Doctr. Num. Vet.*, tom. iii. p. 158, who calls attention to a coin of Julia in Phrygia, on which Poseidon is similarly represented, and quotes Strabo's statement (xii. 579) that Poseidon was worshipped in the *Κατακεκαυμένη*, which was particularly liable to be visited by earthquakes. Similar types are occasionally found on other Phrygian coins also; e.g. Aezanis, B. M., 48, 49; Apameia, B. M., 177. On the earthquake of the year 60 A.D., which totally destroyed Hierapolis along with Laodikeia and Kolossai, cf. *Χάρτες*, p. 473. Poseidon is represented on the above coin of the town as the earth-shaker, although the type is a quite conventional one.

2. *Obv.*—ΛΑΙΡΒΗΝΟΣ. Tête de Bacchus (rather Lairbenos).

Rev.—ΙΕΡΑΠΟΛΕΙΤΩΝ. ΝΕΩΚΟΡΩΝ. Neptune debout, tenant un dauphin de la main droite et un trident de la gauche.

Gessner, *Numismata Graeca popul. et urbium*, p. 265 (ex museo Wakiano) = Mionnet, *Suppl.*, vii. 376. On this coin and on the following one the name is written in the usual way.

3. *Obv.*—Testa di Nettuno barbata e laureata a dr., con tridente sull' omero; sotto delfino.

Rev.—ΙΕΡΑΠΟΛ Diota.

Catalogo del Museo Nazionale di Napoli, Collezione Santangelo, p. 119, No. 11420. On the reverse type, cf. under X.

XXV. ROMA.

Obv.—ΙΕΡΑΠΟ r., ΛΕΙΤΩΝ l. Bust of Apollo, with long hair tied behind and on top, with cloak; lyre at breast. Border of dots.

Rev.—ΘΕΑ r., ΡΩΜΗ l. Roma, helmeted, seated l. on a cuirass, against which leans a shield holding a statuette of Nike in outstretched r., l. on parazonium. Border of dots.

Inv. Wadd., 6115 [Pl. IV. 54]. The obverse similar to that of the coin published in *Χάριτες*, p. 484. A similar type of Roma (probably not Athena) occurs on coins of Laodikeia; cf. B. M., 213, 246–248.

XXVI. SARAPIS.

1. *Obv.*—Bust of bearded Sarapis, with modius; shoulders draped. Border of dots.

Rev.—ΙΕΡΑΠΟ r., ΛΕΙΤΩΝ l. Zeus Laodikeios standing l., in long chiton and cloak; eagle in r., l. on sceptre. Border of dots.

B. M., 27; Berlin, 40, 41; Paris, 558 = Mionnet, iv. 578 [Pl. IV. 55]; Copenhagen, 10; Dresden; Vienna, 19857.

2. *Obv.*—Similar. Border of dots.

Rev.—ΙΕΡΑΠΟ r., ΛΕΙΤΩΝ l. Similar. Border of dots.
B. M., 28.

3. *Obv.*—Similar. Border of dots.

Rev.—ΙΕΡΑΠ r., ΟΛΕΙΤΩΝ l. Similar. Border of dots.
Athens, 5906a; Hunter, 4 (ΙΕΡΑΠΟΛ/ΕΙΤΩΝ), is a variant of the three preceding types.

4. *Obv.*—Similar.

Rev.—ΙΕΡΑΠΟΛ l., ΕΙΤΩΝ r. Similar.
Berlin, 42.

5. *Obv.*—Similar.

Rev.—ΙΕΡ ΑΠ 1., ΟΛΕΙΤΩΝ r. Similar. Border of dots.
N

Copenhagen, 66. The obverses of Nos. 1–5 are from the same die. The coin described by Leake, p. 66, belongs to one of these types.

6. *Obv.*—Similar. Border of dots.

Rev.—ΙΕΡΑΠ 1., ΟΛΕΙΤΩΝ r. Isis standing l., holding sistrum in uplifted r. hand, and situla in lowered l. Border of dots.

Berlin, 44; Paris, 559; Vienna, 32310; Gotha. Very similar to these, but not from the same reverse die, are the following coins which are from the same dies: Berlin, 43; Copenhagen, 11; Athens, 755, 5906; cf. also B. M., 29–31. Mionnet, iv. 579, is a similar coin.

7. *Obv.*—Similar. Border of dots.

Rev.—ΙΕΡΑΠΟ 1., ΛΕΙΤΩΝ r. Similar. Border of dots.

Berlin, 45 [Pl. IV. 56], 46; Copenhagen, 12. The obverses of Nos. 6 and 7 are from the same die; two other specimens are known, Vienna, 29118, 29266 (from the same die?).

8. *Obv.*—Similar. Border of dots.

Rev.—ΙΕΡΑΠ Ο 1., ΛΕΙΤΩΝ r. Similar. Border of dots.

Paris, 560.

9. *Obv.*—Similar. Border of dots.

Rev.—ΙΕΡΑ ΠΟ 1., ΛΕΙΤΩΝ r. Similar. Border of dots.

Berlin, 47; Vienna, 19859. The obverses of Nos. 8 and 9 are from the same die.—The coins described by Leake, p. 66, and Lavy, i. 232, belong to varieties 6–9.

10. *Obv.*—Julia Maesa.

Rev.—| ΕΡΟΠ Ο l., ΛΕΙ r., ΝΩΤ in exergue. Sarapis with modius, seated l. on throne, r. hand on head of Cerberus at his feet, l. on sceptre; before him Isis, standing r., holding a sistrum in uplifted l., and situla in lowered r. Border of dots.

Copenhagen, 45; *Inv. Wadd.*, 6195 [Pl. IV. 57]; cf. also Mionnet, iv. 633 (*obv.* Elagabalus; *rev.* Sarapis); similarly represented, but alone; the description is hardly accurate.

11. *Obv.*—Sarapis. From the same die as the obverses of Nos. 6 and 7. Border of dots.

Rev.—|ΕΡΑ l., ΠΟΛΕΙΤΩΝ r. Tyche, standing l., cornucopiae in l., r. hand on rudder. Border of dots.

Berlin, 48.

12. *Obv.*—Sarapis. From the same die as the obverses of Nos. 1–5. Border of dots.

Rev.—|ΕΡΑΠΟΛΕ l. and above, ΙΤΩΝ r., ΧΡΥΣΟ/ΡΟΑC in exergue. The bearded river-god Chrysoroas, upper part of body naked, seated l. on ground, poppy in r. hand, leaning l. arm on an overturned urn, out of which water flows. Border of dots.

Inv. Wadd., 6091 [Pl. IV. 58]; B. M. (acquired since Catalogue).

XXVII. TWINS.

1. *Obv.*—ΔΗ l., ΜΟC r. Head of young Demos, bound with taenia. Border of dots.

Rev.—| l., ΕΡΑ above, ΠΟ r., ΛΕΙΤΩΝ below (around). Two naked children seated opposite one another on the ground, playing with astragali. Border of dots.

Berlin, 88 = *Nomisma*, vi. p. 6, No. 14 [Pl. IV. 69]. These are probably the same twins as are represented being suckled by a she-wolf on other coins of the city (cf. XXX. below). A similar group is found several times on the coins of the city of Hypaipa: two naked children sitting opposite one another, playing with astragali, behind them a cultus statue of Artemis Anaitis (B. M., Lydia, 59, 60, 65, 70 (Pl. xii. 11)).

2. *Obv.*—ΝΕΩΚΟ l., ΡΩΝ r. Bust of Sarapis with kalathos and robe.

Rev.—ΙΕΠΟ/ΠΑ (*sic*), in two lines above, ΛΕΙ r., ΤΩΝ in exergue. Similar.

Imhoof (present collection) = *Nomisma*, vi. p. 6; No. 15 (Pl. i. 15).

XXVIII. TYCHE.

1. *Obv.*—ΔΗ l., ΜΟC r. Head of young Demos, bound with taenia, with hair falling down at neck. Border of dots.

Rev.—ΙΕΡΑΠΟΛΕΙΤ l., ΩΝΝΕΩΚΟΡΩΝ r. Tyche with kalathos, standing l., r. arm on rudder and cornucopiae in l. arm. Border of dots.

Berlin, 94 (*obv.* counter-marked: Zeus Laodikeios?); Munich, 10; Vienna, 33670.

2. *Obv.*—(ΔΗΜΟC).

Rev.—ΙΕΡΑΠ l., Ο ΛΕΙΤ ΩΝ r. Similar. Border of dots.

Inv. Wadd., 6119; cf. also Mionnet, iv. 593.

- 2A. *Obv.*—ΔΗΜΟC r. Head of young Demos, bound with taenia, hair falling down over neck. Border of dots.

Rev.—ΙΕΡΑΠΟ l., Λ ΕΙΤΩΝ r. Similar. Border of dots.

Vienna, 33415, a variant of the preceding coin.

3. *Obv.*—(ΔΗΜΟC).

Rev.—ΙΕΡΑΠΟ l., ΛΕΙΤΩΝ r. Similar. Border of dots.

Inv. Wadd., 6120; Copenhagen, 20. The small coins of this type are quite different from the larger of the two preceding types. All three types are variants of B. M., 73-75; B. M., 46, is quite a different type of Tyche.

4. *Obv.*—ΙΕΡΑCYN r., ΚΛΗΤΟC l. Bust of young male Senate, bareheaded, with shoulders draped. Border of dots.

Rev.—ΙΕΡΑΠΟ r., ΛΕΙΤΩΝ l. Similar: fruits and ribbons hanging from the cornucopiae, in the bend of which sits a little Plutos. Border of dots.

Berlin, 101.

5. *Obv.*—(ΙΕΡΑ CYNΚΛΗΤΟC). Apparently from the same die as the preceding obverse.

Rev.—ΙΕΡΑΠΟ l., ΛΕΙΤΩΝ r. Similar. Border of dots.

Copenhagen, 24. The coins of types 4 and 5 are variants of B. M., 83; their obverse type is rare on coins of Hierapolis.

6. *Obv.*—(ΙΕΡΑ CYNΚΛΗΤΟC).

Rev.—ΙΕΡΑΠΟ l., ΛΕΙΤΩΝ r. Similar, but with bunch of poppies in r. hand. Border of dots.

Paris, 578 = Mionnet, iv. 598 [Pl. IV. 61]. The obverse and reverse type differ remarkably from those of types 4 and 5. Leake, *Suppl.*, p. 58, is another specimen of types 4 to 6.

7. *Obv.*—ΛΑΙΡ l., ΒΗΝΟC r. Bust of Lairbenos, radiate; shoulders draped.

Rev.—ΙΕΡΑΠΟΛΕΙΤΩ l., Ν ΝΕΩΚΟΡΩ^N r. Tyche, with kalathos, standing l., holding balance in r. hand and cornucopiae in l. arm, in the bend of which sits a little Plutos. Border of dots.

Inv. Wadd., 6108 [Pl. IV. 62]; Berlin, 69.

8. *Obv.*—Annia Faustina.

Rev.—ΙΕΡΑΠΟΛΕΙΤ l., ΩΝΝΕΩΚΟΡΩ^N r. Tyche, with kalathos, standing l., holding phiale over lighted altar in r. hand, and cornucopiae in l., with Plutos as before. Border of dots.

Paris, 605. Variant of B. M., 146.

9. *Obv.*—Similar.

Rev.—ΙΕΡΑΠΟΛΕΙΤ l., ΩΝΝΕΩΚΟΡΩ^N r. Similar to the preceding, but not from the same die. Border of dots.

Inv. Wadd., 6166 [Pl. IV. 63]. A second variant of B. M., 146. B. M., 147, is another type.

10. *Obv.*—Caracalla (?), Elagabalus (?).

Rev.—ΙΕΡΑΠΟΛΕΙΤΩ l., Ν · ΝΕΩΚΟΡΩΝ r. Tyche, with kalathos, standing l., r. hand on rudder; in l. cornucopiae as before. Border of dots.

B. M., 139; Berlin, 174; Vienna, 30284.

11. *Obv.*—Caracalla (?), Elagabalus (?).

Rev.—ΙΕΡΑΠΟΛΕΙΤ l., ΩΝΝΕΩΚΟΡΩ^N r. Similar. Border of dots.

Inv. Wadd., 6164. Variant of B. M., 139.

12. *Obv.*—ΜΑΥΡΑΛΕΞΑΝΔΡΟΚΑΙϚ. Bust of Alexander Severus. Border of dots.

Rev.—ΙΕΡΑΠΟΛΕΙΤΩΝ l., ΝΕ ΩΚΟΡΩΝ r. Similar. Border of dots.

Vienna, 33672.

13. *Obv.*—Philippus Junior.

Rev.—ΙΕΡΑΠΟΛ l., ΕΙΤΩΝ r. Tyche, with kalathos, standing l., r. hand, holding two ears of corn

on rudder, in l. cornucopiae as before.
Border of dots.

B. M., 159, 160; Paris, 613 = Mionnet, iv. 649; Copenhagen, 52; Vienna, 30631.

14. *Obv.*—ΜΑΡΚ ΩΤΑΚΙΛΙ., ΣΕΒΗΡΑ ΣΕΒ. Bust of Otacilia Severa.

Rev.—ΙΕΡΑΠΟ Ι., ΛΕΙΤΩΝ ρ. Tyche Panthea (Nike), standing, winged, with kalathos, facing ρ. with ears of corn on rudder, and in l. cornucopiae. Border of dots.

Berlin, 185 [Pl. IV. 64] = *Kl. M.*, 39 = *Nomisma*, vi. p. 19, No. 17 (Pl. ii. 15). On this type of Tyche, cf. Imhoof, *op. cit.*

15. *Obv.*—ΟΥΕΣΠΑΣΙΑΝΟΣ ρ., ΣΕΒΑΣΤΟΣ Ι. Laureate head of Vespasian.

Rev.—ΙΕΡΑΠΟΛΙΤΩΝ Ι., ΜΝ ΑΠΛΟΣ ρ. Tyche, standing Ι., holding ears of corn and poppy in lowered ρ. hand, cornucopiae in Ι. arm, serpent on Ι. at her feet.

Berlin, 151 = *Kl. M.*, 29. Imhoof-Blumer identifies, with some hesitation, the goddess as Demeter. The type combines the characteristic attributes of both deities: the ears of corn, poppy, and cornucopiae point to Tyche, and the serpent to Demeter (for further details see under Demeter). We, therefore, have a confusion of two types here, but the Tyche predominates in a marked degree.

16. *Obv.*—ΙΕΡΑΠΟΛΕΙ ρ., ΤΩΝ Ι. Head of young Dionysos, crowned with ivy. Border of dots.

Rev.—ΕΥΒΟ Ι., ΚΙΑ ρ. Eubosia, standing Ι., ρ. hand on rudder, cornucopiae in Ι. arm, with a little Plutos in its curve, grasping with his ρ. hand at the fruits hanging over the brim of the cornucopiae.

Munich, 1; Athens, 5905b; Berlin, 22; variant of B. M., 35-37 (Pl. xxix. 11);

Berlin, 23 (= *M. Gr.*, 401, 110). On the reverse of the latter the legend is ΕΥΠΟ/ΧΙΑ. Cf. also Museo Nazionale (Naples), i. 8619.

N.B.—Another type of this goddess is found on a coin of Isinda in Πικρία (*Kl. M.*, p. 374, 5); in her right hand she holds a phiale, in left arm a cornucopiae, in which lies the infant Plutos (cf. Imhoof-Blumer, *ibid.*).

The goddess Εὐπορία is mentioned in an inscription of Hierapolis (No. 26). Cf. *Altentimer von Hierapolis*, pp. 76, 44. On the goddess and the various forms of her name, cf. Imhoof-Blumer, *M. Gr.*, *loc. cit.*, and also his *Lydische Studien*, pp. 108, 182; Waser, in *Pauly-Wissowa*, s.v. "Εὐπορία"; *Philolog.*, lxi. 287. In spite of the various forms of the name, there can be no doubt that she is one and the same goddess. She closely resembles Tyche in her nature.

17. *Obv.*—NE l., ΩΚΟΡΩΝ r. Head of bearded Herakles. Border of dots.

Rev.—I l., PA above, ΠΟΛ r., ΕΙΤΩ in exergue, N above. Winged griffin r., wheel below. Border of dots.

Paris, 580a [**Pl. IV. 65**]; Gotha; Imhoof (present collection). That a reference to Tyche should be recognized in this type is shown by a coin of Hadrianopolis in Phrygia (*Kl. M.*, p. 233, 3; *obv.* Caracalla), on which a standing Tyche (not Nemesis) is represented with a wheel at her feet, and a winged griffin in front of her.

XXIX. VESSEL.

Obv.—Agrippina.

Rev.—[X]ΑΡΗΣ · Β · ΠΑΠΙΑΣ · I below and r., ΕΡΑΠΟΛΙΤ-
[ΩΝ]. Cup-shaped vessel on a high pillar, palm-branch on l. and r.

Berlin, 142 [**Pl. II. 29**]. The type, which I am unable to explain, occurs only on this one coin.

XXX. WOLF.

1. *Obv.*—ΑΑΙΡ l., ΒΗΝΟC r. Bust of Lairbenos, radiate ; shoulders draped. Border of dots.

Rev.—ΙΕΡΑΠΟΛΕΙΤΩΝ above, ΝΕΩΚΟΡΩ/Ν in exergue.
She-wolf l., suckling twins.
Athens, 5905b [Pl. IV. 66].

2. *Obv.*—Similar.

Rev.—ΙΕΡΑΠΟΛΕΙΤΩ above, Ν in field above, ΝΕΩΚΟΡΩ/Ν in exergue. Similar. Border of dots.

Inv. Wadd., 6109. The obverses of Nos. 1 and 2 belong to the period before Philip, and are not from the same die as the obverse of the following coins, which belong to the time of Philip.

3. *Obv.*—Similar ; cf. note to No. 2.

Rev.—ΙΕΡΑΠΟΛΕΙΤ above, ΩΝ in exergue. Similar. Border of dots.

B. M., 63, 64 ; Berlin, 77 ; Paris, 569 = Mionnet, iv. 587 ; Munich, 5 ; Vienna, 30849. The reverses are not all from the same die.

4. *Obv.*—Aquillia Severa.

Rev.—ΙΕΡΑΠΟΛΕΙΤΩ Ν above, ΝΕΩΚΟΡΩ/Ν in exergue. Similar. Border of dots.

Inv. Wadd., 6169. Variant of B. M., 145.

5. *Obv.*—Otacilia Severa.

Rev.—ΙΕΡΑΠΟΛΕΙΤΩΝ above, ΝΕΩΚΟΡΩ/Ν in exergue. Similar. Border of dots.

Berlin, 188.

6. *Obv.*—Similar.

Rev.—ΙΕΡΑΠΟΛΕΙΤΩ above, Ν in exergue. Similar. Border of dots.

Berlin, 189, 190.

The frequency of this type is explained by the fact

that the Lykos flowed past Hierapolis and joined with the Maiandros a little below the town. While the type on the coins is influenced by the Roman legend, we find the Lykos and Kapros represented on the coins of the neighbouring city in the form of a wolf and a bear.

XXXI. ZEUS LAODIKEIOS.

1. *Obv.*—ΙΕΡΑΠΟ r., ΛΙC l., in straight lines. Bust of city-goddess with stephane; shoulders draped. Border of dots.

Rev.—ΙΕΡΑΠΟΛΕΙ r., ΤΩΝ l., in straight lines. Zeus Laodikeios in long chiton and himation, standing l., holding eagle in r. hand, and leaning l. on sceptre. Border of dots.

Berlin, 8 [Pl. IV. 67]. Does the coin described by Mionnet, *Suppl.*, vii. 370, belong to this type?

2. *Obv.*—Bust of young Dionysos, crowned with ivy; shoulders draped. Border of dots.

Rev.—ΙΕΡΑΠΟ r., ΛΕΙΤ ΩΝ l. Similar. Border of dots.

B. M., 25, 26; Berlin, 20 [Pl. IV. 68]; Copenhagen, 23; Athens, 5906b; Gotha; Vienna, 19680; cf. also Mionnet, *Suppl.*, vii. 366; Museo Nazionale (Naples), i. 8621. The coin described by Leake, p. 66, probably also belongs to this type. The obverse, which he describes as "female head to r.," really represents Dionysos.

3. *Obv.*—Head of young Dionysos, crowned with ivy, thyrsos in front. Border of dots.

Rev.—ΙΕΡΑΠΟ r., ΛΕΙΤ ΩΝ l. Similar. Border of dots.

Paris, 563 = Mionnet, iv. 580. Both obverse and reverse differ from the preceding type.

4. *Obv.*—ΓΕ 1., ΡΟΥCΙΑ r. Bust of Gerousia, laureate and veiled; shoulders draped. Border of dots.

Rev.—ΙΕΡΑΠΟ[Λ] 1., ΕΙΤΩΝ r. Similar. Border of dots.

Vienna, 30852; *Inv. Wadd.*, 6126. Variant of B. M., 82.

5. *Obv.*—Nero.

Rev.—ΙΕΡΑ ΠΟΛΕΙ 1., ΑΝΤΩΝΙΟΥC r., in straight lines.
ΤΩΝ ΚΑΛΟC
Similar. Border of dots.

B. M., 123 (Pl. xxxi. 10); Berlin, 143, 144 (cf. *Gr. M.*, 739, 696); Gotha; Munich. The reverses of these specimens are not from the same die. The coin in the Munich collection has been erroneously ascribed to M. Aurelius, in Χάριτες, p. 488.

6. *Obv.*—ΦΑΥCΤΕΙΝΑ r., CΕΒΑCΤΗ 1. Bust of Faustina II.

Rev.—ΙΕΡΑ ΠΟ 1., ΛΕΙΤΩΝ r. Similar.

B. M., 138; Vienna, 19877; Berlin, 160; *Inv. Wadd.*, 6157; Copenhagen, 43; Gotha. Berlin, 161, is similar but not from the same dies; Hunter, 9, is an eighth specimen; cf. also Mionnet, iv. 624.

7. *Obv.*—Similar.

Rev.—ΙΕΡΑΠΟΛΕΙ r., ΤΩΝ 1. Similar.

Vienna, 19876. Variant of the preceding type; cf. also Leake, p. 66; *Suppl.*, p. 58.

8. *Obv.*—Head of bearded Herakles, without club. Border of dots.

Rev.—ΙΕΡΑΠΟ 1., ΛΕΙΤΩΝ r. Eagle, with outspread wings facing, head l. Border of dots.

Berlin, 26; *Inv. Wadd.*, 6096. Variant of B. M., 53.

XXXII. ZEUS TROIOS.

Obv.—ΣΕΥC l., ΤΡΩΙOC r. Head of Zeus Troios, bound with taenia. Border of dots.

Rev.—ΙΕΡΑΠ r., ΟΛΕΙΤΩΝ l. Apollo Kitharocdes in long chiton and cloak, standing r., holding lyre in l. hand and plektron in the r. hand. Border of dots.

Berlin, 13 = *Gr. M.*, 738, 693 (Pl. xii. 22) = *Z. f. N.*, ii. 107; *Inv. Wal.*, 6089; Vienna, 32630 Variant of B. M., 39 (Pl. xxx. 1), 40; Berlin, 14 (with reverse ΙΕΡΑΠO r., ΛΕΙΤΩΝ l.). The obverses from the same die as XIV. 5. On the P, peculiar to the time of Hadrian, cf. Imhoof-Blumer, *op. cit.*

SUPPLEMENTARY NOTE.

Herr Imhoof-Blumer had sent me casts of a coin in his present collection, which is of importance for this article.

Obv.—AY · K · MAVPAN l., ΤΩΝΕΙΝOC r. Bust of the Emperor Caracalla, laureate, wearing cuirass, aegis at breast, from which rise two serpents. Border of dots.



Rev.—ΙΕΡΑΠO l., ΛΕΙΤΩΝ r., ΝΕΩΚΟΡΩ/Ν in exergue. Caracalla, head radiate, standing r., in military dress, leaning l. hand on sceptre, in r. holding patera over a lighted altar; opposite him is the city-goddess with mural crown, l. hand on sceptre, offering wreath to the Emperor with r. hand. Border of dots.

The reverse is from the same die as the Paris coin (No. 601 = Mionnet, iv. 617), published by me in *Χάριτες*, p. 479. As Imhoof's better preserved specimen shows, the goddess does not hold a palm in her left hand, but is leaning on a sceptre.

I had already pointed out (*op. cit.*) that this medallion was struck on the occasion of Caracalla's visit to Hierapolis, to express the gratitude of the city for the neokoria granted it on this occasion. The obverse of Imhoof-Blumer's specimen, however, has the portrait of Caracalla and a different legend (cf. the figure above) from the Paris specimen (cf. *op. cit.*, Pl. vii. 2). That it is a portrait of Caracalla is clear from a comparison with the obverse of the Berlin coin on Pl. vii. 1 (reverse, three temples) which is undoubtedly of this Emperor. The obverse of the Paris specimen cannot, therefore, as I had supposed, represent Caracalla; from its similarity to the obverse of Pl. vii. 4, I would rather suggest it represents Elagabalus. We thus have the same reverse type used under two Emperors (the Paris and Imhoof specimens are from the same reverse die). The reverse type might thus not be connected with the granting of neokoria to the town. But this type appears nowhere else on the coins of Hierapolis; it is, therefore, certainly right to connect it with some event of importance to the city, and this can only be the granting of neokoria. The difficulty is, in my opinion, best cleared up by supposing that the neokoria, granted in the first place to the city by Caracalla, was again confirmed by Elagabalus, and that the latter was not in any way the granting of a new grade of neokoria. The coins actually show that Hierapolis only possessed a singular neokoria.

INDEX OF TYPES.

(* Indicates that the type is of local importance)

Aktia, I.

Apollo Archegetes, III, XIV, XVI.

„ Kitharoedos, II, XX, XXV, XXXII.

* „ Lairbenos, cf. Laiibenos.

Ares, IIA.

Artemis, III, VIII, XVI.

Asklepios, IV.

Athena, V.

Boule, II, XIII, XV, XIX, XXII, XXIII.

*Bull, VI, VII.

Chrysoroas, V, VIII, XXVI.

City-goddess, IV, X, XIII, XIX, XXI, XXIII, XXXI, Suppl. note.

*Cornucopiae, XI.

Demeter, IX, XXVIII.

Demos, I, II, VIII, XIV, XV, XVII, XIX, XXIV, XXVII, XXVIII.

Dionysos, III, IV, IX, X, XXIII, XXIV, XXVIII, XXXI.

*Double-axe, XI.

Eagle, XXX.

Eubosia, XXVIII.

Gerousia, XV, XXXI.

Griffin, XXVIII.

Hekate, XII, XXI.

Herakles, IV, V, VII, XIII, XVI, XXVIII, XXXI.

Hermes, V.

*Hero (riding), XV.

* „ (standing), XIV.

Hygieia, IV, XVI.

Isis, XVII, XXVI.

Kybele, XVIII.

*Lairbenos (Apollo Lairbenos), II, VI, VII, IX, XI, XVI, XXI, XXIV, XXVIII, XXX.

Mên, XIX.

*Mopsos, XX.

Nemesis, IV, V, XXI.

Nike, XXII.

Persephone, XXIII.

Pluto, XXIII.

Poseidon, XXIV.

Roma, XXV.

Sarapis, XXVI, XXVII.

Selene, XXI.

Senate, II, IIA, V, VIII, IX, XIV, XVI, XX, XXIII, XXVIII.

Telesphoros, XVI.

*Torreboas, XX.

Twins, xxvii, xxx.

Tyche, xxvi, xxviii.

*Vessel, xxix.

Wolf, xxx.

Zeus, ii.

*Zeus Bozios, xv.

„ Laodikeios, v, xxvi, xxxi.

„ Troios, i, xiv, xix, xxxii.

LEO WEBER.

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ERRATA.

A certain number of errors have found their way into the spacing of the inscriptions in the first portion of this article, viz.:—

P. 3, I. 1. Rev. *Read* Ω NNEΩKOP, &c.

P. 5, 4. Rev. *Read* ΙΕΡΟΠΟΛΕΙ(!)[ΤΩΝ], &c.

P. 7, 11. Rev., and p. 8, 14. Rev. *Read* Λ ΕΙΤΩΝ r., &c.

P. 11, IV. 1. Rev. *Read* ΙΕΡΑΠΟΛΕ Ι l., &c.

„ „ 3. Rev. *Read* ΙΤ ΩΝ r., &c.

P. 14, 5. Rev. *Read* ΙΕΡΑ ΠΟ l., &c.

P. 17, VIII. 1. Rev. *Read* ΙΕΡΑΠΟΛΙ(!)Τ ΩΝ, &c.

P. 21, 8. Rev. *Read* ΙΕ ΡΑ Π ΟΛΕΙ ΤΩΝ, &c.

P. 28, 4. Rev. *Read* Ι ΕΡΑΠΟΛΕΙΤΩ Ν, &c.

VII.

CHRONOLOGY OF THE DANUBIAN WARS OF THE EMPEROR MARCUS ANTONINUS.

THE period from the Oriental triumph to the death of Vêrus forms a minor unity in itself. It comprises a series of operations serving as a prelude to the great Danubian wars which fill the remaining years of Marcus' reign, and lends itself to treatment as a separate whole. The coinage for this period is singularly sparse, and affords very imperfect chronological indications. The method adopted in the previous essay (*Num. Chron.*, 1911, pp. 209-267), of examining the coins year by year and recording the results in annalistic form, offers under these fresh conditions little prospect of success. Abandoning this method, therefore, and taking the coinage of these years as a whole, I shall first attempt to ascertain the fixed points in the course of events, and endeavour so to construct an outline of the chronology of the war.

The first question is that of the date at which the troubles on the Danube came to a head. It was no sudden outbreak. It was only with the greatest difficulty

NOTE.—In the articles dealing with the reign of Marcus Aurelius Antoninus, I wish to acknowledge my debt to my friend and former tutor, Mr. A. S. L. Farquharson, of University College, Oxford, who both helped with suggestions and kindly permitted me to draw upon the literary and epigraphic material collected for his forthcoming monograph on this emperor.—C. H. D.

that the barbarians had been held in check during the Oriental campaigns.¹ But it is clear from the historians that at last, after some considerable period of resistance, the long threatened catastrophe could no longer be delayed, and the barbarians passed the frontier. But as to the date of the invasion, their accounts are very indefinite. Dio, or rather his epitomator Xiphilinus,² appears to ignore any fighting on the Danube before the death of Verus. His language is vague enough for anything. After relating Verus' return from the East, he adds, *λέγεται μετὰ ταῦτα . . . διαφθορῆναι*. Yet so far as he gives any chronological indication at all, he would appear to make the beginning of the Danubian wars about contemporaneous with the appointment of Avidius Cassius to the governorship of Syria, *i.e.* about 166. Capitolinus³ says with slightly less vagueness, "*dum Parthicum bellum geritur, natum est Marcomannicum*." The expression "*natum est*" leaves a good margin of uncertainty as to what is actually meant, but it would seem naturally to apply rather to the "brewing" of the war, the working of its causes and predisposing conditions, than to the commencement of regular hostilities. We already knew that the barbarians were restless, at any rate since the last year of Pius. Probably, however, Capitolinus means to intimate, in a general way, that the troubles on the Northern frontier became acute before the Parthian War was fairly over, and we may take him as dating the great invasion not later than 166, which is, as we have seen, the date vaguely

¹ Cf. *H. A.*, iv. 12, § 13: "(bellum) Marcomannicum, quod diu eorum qui aderant arte suspensum est."

² *Epit. Dion. Cass.* lxxi. 2-3.

³ *H. A.*, iv. 12, § 13.

suggested by the account in Dio for the beginning of the war. Further than this the literary authorities do not take us, for Eutropius and Aurelius Victor ignore this little war completely.

It is perhaps hardly to be expected that a definite date for such an event as a barbarian invasion should be given by the coins, and we find in fact that the coinage up to 166 is almost wholly devoted to Eastern affairs, so far as it has reference to military events at all. But I have already discussed in the preceding essay a type of Rome with the Palladium (*Roma Aeterna*),⁴ which, appearing on the coins of Marcus from about August, 165, persists throughout 166, and I have suggested reasons for attributing to it a reference to the danger on the Northern frontier. If such a reference may be assumed, the appearance of the type might perhaps be taken to date a fresh stage in the development of the German peril, and the vague temporal indication, "*dum Parthicum bellum geritur*," would receive a more precise *terminus post quem*. But if the autumn of 165 was really marked by some fresh departure on the Danube—and it is quite probable that it was—this was certainly not the great irruption which finally precipitated the war; for *diplomata*⁵ discovered in Raetia attest a discharge of veterans in that region in March, 166, while Verus was still in the East (for he is styled PROCOS.); and veterans would hardly have been discharged in one of the most exposed provinces if the invasions had already commenced. We must therefore conclude that the catastrophe occurred, at the last,

⁴ See Cohen, III. *M. A.*, 481, and my remarks on pp. 31 *sqq.* of the preceding essay, *Num. Chron.*, Ser. IV. Vol. XI.

⁵ See *Eph. Epigr.*, ii. p. 460.

perhaps, suddenly and unexpectedly, between March, 166, and the close of the Parthian war in the late autumn of that year.

The next point to be fixed is the date at which the emperors left Rome for the seat of war; and in relation to this a piece of numismatic evidence is at once available. There is extant a bronze medallion of Verus,⁶ which I describe from an example at Berlin :

Obv.—L. VERVS AVG. ARM. PARTH. MAX. Bust r., laureate, loricate, *paludamentum* on l. shoulder.

Rev.—TR. P. VIII. IMP. IIII. COS. III. The emperors on horseback advancing r.; apparently Marcus is in the foreground and slightly in advance, while Verus rides on his l. and slightly in the rear; each holds a spear in the r. hand; they are preceded by a soldier in lorica advancing r., looking backwards, holding spear over r. shoulder and wearing shield on l. arm.

There is no difficulty in recognizing this type as a *Profectio Augustorum*, practically a repetition of that of 162. It is dated to 168. But we can date it roughly within the year. There occurs during 168 a change in the number of the imperial title. The proportions of coins before and after the change (taking as usual the Berlin collection as a standard) is as follows :—

Coins of Marcus with IMP. IIII.	.	.	9	} 29
" " " IMP. V.	.	.	20	
Coins of Verus with IMP. IIII.	.	.	4	} 17
" " " IMP. V.	.	.	13	

The mean proportion of the coins with IMP. IIII. to the whole mint of the year is between $\frac{1}{3}$ and $\frac{1}{4}$. This would indicate a change somewhere about February–March, 168.

⁶ Not given in Cohen.

The *Profectio* medallion has IMP. IIII. It falls, therefore, between December 10, 167, and, say, the end of February, 168—that is, during the winter. But the *Profectio* itself can hardly have taken place in winter time. We may fairly regard the medal as a belated record of an event which actually took place in the autumn of the previous year. Such a delay would surprise us less in a medallion than in an ordinary coin. Provisionally, therefore, let the *Profectio* be dated as late as possible in 167.

Turning now to the coins of the earlier year, we find a number with the obverse of Marcus and the following reverse: ⁷

Obv.—TR. POT. XXI. IMP. IIII. COS. III. S. C. The emperor, togate, with *cinctus Gabinus*, standing l., placing incense on tripod.

Some examples of this type, given in Cohen,⁸ have the explanatory legend VOTA. No doubt Eckhel⁹ is right in referring the type to the various religious rites which are recorded in the Life¹⁰ to have preceded the departure of the emperors from the city. The same passage in Capitolinus which records these *vota* relates also that the terrible events of the year long delayed the *Profectio* of the emperors for the seat of war.^{10a} This confirms the suspicion we have already formed that the *Profectio* took place late in the year 167.

The next question concerns the assumption of the title IMP. V., which is the next fixed point in the progress of the war. We have already seen that the change of titulature upon the coins may be approximately dated to

⁷ Cf. Cohen, III. *M. A.*, 817.

⁸ Cohen, III. *M. A.*, 1019.

⁹ Eckhel, vii. p. 53.

¹⁰ *H. A.*, iv. 13.

^{10a} *H. A.*, iv. 13, § 1, "*retardatusque a bellica profectione.*"

February, 168. But here a difficulty arises. Inscriptions show the new title already in use in 167, and one of them¹¹ is dated May 5, 167. After making all allowances for possible disorganization and delay at the mint, it seems unreasonable to suppose that an interval of nine months could be accounted for in any such way. That such disorganization prevailed is indeed probable from a consideration of the general state of Rome in this year. The city was in the throes of plague and famine, and in all probability financial embarrassment accompanied the general distress. This state of things may be reflected in the unusually scanty coinage. The Berlin Collection possesses for this year only 15 coins of Marcus, as against 38 for 166, and 29 for 168. In the case of Verus the difference is not so great; there are 17, as against 25 and 18 respectively; but here 11 out of 17 are of one type. It is evident, therefore, that there was some kind of dislocation at the mint during this year. We might have accounted on these lines for a shorter delay, but not, I think, for the postponement of a change in titulature from May to the following February. We must seek some other explanation.

The scanty coinage of 167 shows a disproportionately large issue of coins of a single type, that of Victory bearing a garland and palm.^{11a} This type appears on no less than 7 out of the 15 coins of Marcus' twenty-first tribunician year, and 11 out of the 17 coins of Verus' seventh tribunician year, in the Berlin Collection. The type is indeed common enough, but the fact that the victory-types of the preceding year do not include this

¹¹ *C. I. L.*, iii. p. 888, no. 46.

^{11a} See Cohen, II. *M. A.*, 815; cf. also the type of Mars bearing a trophy, *ib.* 794.

one, and that, on the other hand, it is so prominent among the coin-types of 167, seems to show conclusively that the victory in question is not one of the Oriental successes commemorated in 166, but a fresh event of 167. Such a victory can hardly have been won elsewhere than in the new seat of war on the Danube. The idea must at once occur that this unknown victory of 167 may have something to do with the appearance of IMP. V on the inscriptions of May, 167, and the following months. If, however, there was a victory in the Danube region at that time, it cannot have been one gained by the emperors in person, for, as we have seen, their *profectio* cannot well be dated earlier than the autumn of this year. This suggests a victory won by legates in the affected provinces. A fragment of Dio Cassius preserved by Petrus Patricius¹² alludes to a victory won over the Langobardi by two of Marcus' generals, Vindex and Candidus. The date of this victory is unknown, but it appears to have occurred before the emperor was at the

¹² Frag. 6, quoted by Mommsen, *Prüfungen*, p. 209, note 2: Λαγγι-
 βάρδων καὶ Ὀβίων ἐξακισχιλίων Ἰστρον περαιωθέντων τῶν περὶ Βίνδικα ἱππέων
 ἐξελασάντων καὶ τῶν ἀμφὶ Κάνδιδον πεζῶν ἐπιφθασάντων εἰς παντελὴ φυγὴν
 οἱ βάρβαροι ἐτρίποντο· ἐφ' οἷς οὕτω πραχθεῖσιν ἐν δέει καταστάντες ἐκ
 πρώτης ἐπιχειρήσεως οἱ βάρβαροι πρέσβεις παρὰ Αἴλιον Βάσσον τὴν Παιονίαν
 διέποντα στέλλουσι Βαλλομάριόν τε τὸν βασιλέα Μαρκομάνων καὶ ἑτέρους δέκα,
 κατ' ἔθνος ἐπιλεξάμενοι ἕνα· καὶ ὅρκοις τὴν εἰρήνην οἱ πρέσβεις πιστωσάμενοι
 οἴκαδε χωροῦσιν. Mommsen observes that this incident must have hap-
 pened before the outbreak of the great war, from the position of the
 fragment, immediately before a quotation of Dio. LXXI. xi. The
 deduction is not, however, certain, though the fact is probable. Another
 possibility is suggested by the recent discovery at Köln of an altar set up by
 T. Flavius Constans *praef. praet.*, who is thought to have been the colleague in that
 office of the Victorinus who died in 167-8. The presence of a praetorian prefect on
 the lower Rhine can only mean a special military expedition, and it is quite possible
 that in or about 167 Constans won a victory over the Germans which warranted a
salutatio. V. Domaszewski in *Römisch-Germanisches Correspondenzblatt*, 1910, pp. 3-4.

front. It is just possible that this victory may be that of 167, which earned the fifth *salutatio* from the troops. The identification, however, is quite conjectural, but in any case it is likely that we are dealing with some such situation. We have then to account for the non-appearance of the title upon the coins of this year.

Dio¹³ mentions in connexion with a later campaign that in one particular case Marcus accepted the title *Imperator* from the soldiers, καίπερ οὐκ εἰωθώς, πρὶν τὴν βουλὴν ψηφίσασθαι, τοιοῦτόν τι προσίεσθαι. It was, therefore, the custom of this emperor not to assume an addition to his imperial title until the Senate had given its consent; if, therefore, we could suppose that in the present case the Senate did not confirm the *salutatio* until some months after it had been given by the army, a sufficient explanation of the delay would be found. Inscriptions are habitually looser than coins in their usage of titles, and particularly in giving the emperor titles which did not formally belong to him at the time; thus they frequently give the title of *pontifex maximus* to Verus; they retain in the style of Marcus the titles ARMENIACVS PARTHICVS long after he had dropped them from the coins, and add MAXIMVS to his GERMANICVS SARMATICVS. It is true that an imperial salutation is not quite on the same footing; yet if there was any ground for doubt as to whether the new salutation could or could not properly be used, we might reasonably expect to find it inserted on inscriptions and omitted on coins. The salutation by the soldiers was, after all, valid, even without the Senate's decree, except to the over-scrupulous. But why was the salutation not at

¹³ *Epit. Dion. Cass.*, lxxi. 10.

once confirmed in the ordinary course by the Senate? One is inclined to say that the city was so demoralized by the plague that the Senate hardly met in the latter half of 167. But a more plausible reason may be suggested. We are dealing now with an emperor who was not a lover of high-sounding titles, who had the most scrupulous regard for propriety, and who was disposed to pay much deference to the Senate in points of external etiquette, however little he was prepared to abate of his powers in more serious matters. It is now Marcus and not Verus who is primarily responsible for the war. We shall have during his sole reign several instances of a year's successful fighting commemorated by an issue of victory-coins, without any increase in the number of the imperatorial title, clearly because the campaign of the year in question was not decisive, but needed to be completed by the following year's operations. The same is the case in the present instance. The victory of the middle of 167, whatever its exact nature, was clearly not a decisive one. The *profectio* of the emperors in person was none the less called for. The Victory-type which celebrates it is the one which has already been used during the Oriental campaigns to commemorate an incidental victory which fell short of deciding the result of the campaign, and was not followed by a fresh *salutatio*. It may well be, however, that the troops of Vindex and Candidus (if the victory is really theirs), anxious naturally to exalt their own achievement, acclaimed the emperor after the successful close of the fighting. This would suffice to account for the appearance of the IMP. V in inscriptions of the middle of 167. But when the news of the salutation reached Rome, Marcus may have intimated to the Senate his

desire that it should not be confirmed and officially adopted until further operations had rendered the victory decisive. On his appearance before Aquileia at the close of the year the barbarians retired and capitulated, and during the winter that he spent in that town he might fairly feel justified in sanctioning the official adoption of the title IMP. V. He was not able to prevent the soldiers from acclaiming him on the frontier, or the provincial governors from accepting the salutation as valid. But being present in the city when the news arrived, he *could* prevent the Senate from confirming it. If we assume he did so, we have a possible reconciliation of the discrepancy between the two sources of evidence.

The coinage of this year, 168, exhibits other types beside the *profectio*, which have some bearing upon the war. Among those of the earlier part of the year, with the inscription IMP. IIII., the most interesting reverse is the following, which I describe from a bronze medallion of Marcus at Berlin:¹⁴

TR. P. XXII. IMP. IIII. COS. III. Jupiter, nude, standing, facing the spectator, holding in r. hand *fulmen*, in l. hand sceptre; his lifted arms cause the robe to spread widely behind; at his feet on either side stand the emperors—Marcus to l., togate, standing r., holding scroll in l. hand; Verus to r., togate, standing l., holding scroll in l. hand.

There is no explanatory inscription, but the meaning of the type is clear; the emperors are under the protection of the great god of the Capitol. A closely similar type occurs on coins of Commodus¹⁵ for the year 181, and there it is accompanied by the inscription IVPPITER CONSERVATOR, which quite clearly expresses

¹⁴ Cohen, II. *M. A.*, 886,

¹⁵ *Ibid.*, III, *Commode*, 273-4.

the nature of the present type. Our medallion in fact is intended as a recognition of the expected answer of the god to the vows and prayers of the preceding year. The simple type which commemorated these vows in 167 is elaborated into a complex composition representing a sacrificial scene, on a medallion of this year given by Cohen.¹⁶ Similar in intention to the Jupiter Conservator coin, but simpler in conception and design, is the following coin representing one of his companions of the Capitol:¹⁷

Æ². *Obv.*—M. ANTONINVS AVG. ARM. PARTH. MAX. Head r., laureate.

Rev.—TR. P. XXII. IMP. IIII. COS. III. S. C. (in exergue). Minerva in helmet and χιτών, standing l., holding in r. hand owl, and laying l. hand on shield; spear rests on l. arm.

This type recalls the Minerva Pacifera of 164, but here the owl takes the place of the palm-branch. We have a simple representation of the goddess with her proper attributes, embodying merely an appeal to Minerva without reference to any special function.

If we look among the coins with IMP. V. for anything to indicate the origin of the title we are disappointed. The characteristic type combined with the new inscription (in the proportions $\frac{6}{20}$ for Marcus and $\frac{5}{13}$ for Verus) is that of Fortuna Redux.^{17a} The type is common, but

¹⁶ Cohen, II. *M. A.*, 1029. It is worth remarking that we have here another instance of delay in the appearance of a special medal, which will help to justify the case of the *Profectio*-medal of this year.

¹⁷ At Berlin; cf. Cohen, II. *M. A.*, 888.

^{17a} Cf. Cohen, II. *M. A.*, 207; Eckhel, vii. p. 57; his remarks on the type are, I think, clearly wrong. He thinks it testifies to Marcus' safe return; this can hardly be, as it occurs on coins before Verus' death, and therefore also before Marcus' return.

I think its prominence shows that it is intended as a special allusion to the events of the year. The older notion was that *Fortuna Redux* always had reference to a return of an emperor to Rome. I have already, in the preceding essay, noticed one case where such an interpretation is untenable, and here again it is impossible, for we know from the historians that Marcus did not return to Rome until after the death of Verus, and all evidence shows that Verus died in 169. The type should, I think, be interpreted according to its obvious signification, as referring to a return of good fortune after a period of danger or disaster. Such a period Rome had experienced during the last two or three years, and our type is, so to say, an expression of the relief which every one felt at the news that the barbarians had retired and submitted: "the tide has turned and better times are coming," it says in effect.

If the dates so far fixed for the outbreak of the war, the first victory, the departure of the emperors for the front, and the adoption of IMP. V. in the titulature of the coins, are correct, the remaining events of the war fall naturally into place. The two winters which the emperors appear, from the narratives in the *Historia Augusta*, to have spent in Aquileia, will be those of 167-8 and 168-9, and the return to Rome, during which Verus died, is clearly fixed at the beginning of 169. The death of the younger emperor is marked on the coins of Marcus by the omission of the titles ARM. PARTH. MAX., which he held only by virtue of his divided *imperium*, as well as of IMP. V., which might similarly be regarded as belonging only to the imperial partnership, and not to the surviving partner by himself.

Coins of Verus for the few weeks of his ninth tribunician year are very scanty, and show no fresh type.¹⁸ The coins of Marcus for the same period are somewhat more interesting. The Fortuna Redux type is retained,¹⁹ and along with it we find the common type of Salus.²⁰ This type is even more vague than that of Fortune, but without seeking for any more specific reference we can at least say that it was not inappropriate at a time when the plague was raging at Rome and in the army, and when the younger emperor himself was showing signs of ill-health; for although the final attack in January was sudden, he was during this winter under treatment by Galen. Besides these types of rather indefinite meaning, we have a bronze medallion with a new Victory-type:²¹

Obv.—M. ANTONINVS AVG. ARM. PARTH. MAX. Bust r., laureate, loricæ, and paludate.

Rev.—COS. III. Victory wearing χιτών and ἱμάτιον, standing l., with head turned r., leaning on cippus, holding in r. hand wreath, in l. hand palm.

¹⁸ I have noted a coin at Berlin as follows:—

R. *Obv.* IMP. L. VERVS AVG.—Head r. bare.

Rev. TR. P. VIII. COS. III.—Female figure in diadem, χιτών and ἱμάτιον, standing l., holding in r. hand abacus, in l. hand sceptre.

This is the well-known *Liberalitas* type. There is a LIB. V. on the coins of Marcus for this year, but after Verus' death, cf. Eckhel, vii. p. 57. The absence of ARM. PARTH. MAX. in itself renders the coin suspicious, and it is not given by Cohen. The consular number is not certain: two strokes only are visible, but the coin is much worn.

¹⁹ See Cohen, II. *M. A.*, 206.

²⁰ See Cohen, *ib.* 825 *sqq.*; a large and more important issue of Salus coins, however, follows the death of Verus; see Cohen, 543 *sqq.*; Eckhel, vii. p. 58. They bear the inscription SALVTI AVG., while the coins struck during Verus' lifetime are uninscribed; and they are to the uninscribed coins in the proportion of 8:2 in the Berlin Collection.

²¹ Cf. Cohen, *ib.* 137.

This is merely an adaptation of the simple Victory-type of 167 to the more elaborate style proper to a medal, and it was no doubt struck as an appropriate commemoration of the general results of this short war. The following type, which appears on bronze coins of Marcus for this period, is also of interest: ²²

TR. P. XXIII. IMP. V. COS. III. Female figure in helmet, χιτών (or lorica) and short cloak, standing l., with l. foot on helmet, holding in l. hand spear, in r. hand Victory.

This figure is called by Cohen, and no doubt rightly called, Rome. It represents the Roman power triumphant over the barbarians, and may be compared with Verus' Roma Victrix of 165.

Neither this type nor the previous one implies, I think, a new victory in 169, or rather late in 168. The literary authorities give no hint of any fighting after the emperors had crossed the Alps, and there is nothing in these coins which make it necessary to suppose any such fighting. The Victory is an elaboration of a previous type, and we have other cases in which the coinage of the year which saw the conclusion of peace recalls and sums up the types of the war. The Roma Victrix is a suitable figure to represent in a summary form the results of the *Expeditio Germanica*.²³

One more piece is perhaps worth noting, though its

²² Cf. Cohen, *M. A.*, 908.

²³ One might contrast the *walking* Roma Victrix of 165 (struck while the war was in progress) with the *standing* Roma Victrix of 169 (struck, it is here argued, after the close of the fighting), as presenting, the one the process, and the other the completed fact—ἡ νικῶσα 'Ρώμη and ἡ νικήσασα 'Ρώμη.

bearing on the war is slight. It is a bronze medallion of Marcus: ²⁴

Obv.—M. ANTONINVS AVG. ARM. PARTH. MAX. Bust r., laureate, loricate, and paludate.

Rev.—TR. P. XXIII. IMP. V. COS. III. Female figure wearing diadem, *χιτών* and *ἱμάτιον*, enthroned l., with feet on footstool, holding in l. hand sceptre, and extending r. hand; to l. two nude genii approaching her bearing *cornuacopiae*.

The figure is called, by Cohen, Faustina. Possibly he is right. The point is of little importance. In any case the idea is that the war has restored peace and plenty in place of the distress of 167.

We have now reviewed the whole of the somewhat scanty numismatic evidence for the first Danubian war, the *Expeditio Germanica* of inscriptions, and we may recapitulate in the light of the literary sources, that is, practically in the light of the two narratives in the *Historia Augusta*, for neither Dio, nor Eutropius, nor Victor, notices this little war. The account given by Capitolinus in his Lives of the two emperors is sufficiently meagre, although he complacently observes that the whole story "*in Marci vita plenissime disputatum est.*" The narrative is as follows.²⁵ After the preparations for the war and precautions against plague and famine were completed, the emperors left Rome for the front. On their arrival at Aquileia the barbarians retired and sent in their submission. Verus desired to withdraw at this point, but Marcus insisted on further advance, and the emperors crossed the Alps. No fighting is mentioned, but we are told that the country north of the mountains

²⁴ Cf. Cohen, *l.c.* 909.

²⁵ *H. A.*, iv. 12, § 13-14, § 8; v. 9, §§ 7-11.

was settled, and measures taken for the defence of Italy and Illyricum. The emperors then returned—to Aquileia, evidently. Then at length Marcus yielded to his colleague's entreaties, and the return to Rome was commenced. On the way Verus died at Altinum. These events are to be spread (from the great invasion to the death of Verus) over the period 166–169.

The year 166, the year of the Oriental triumph, is marked by the great simultaneous invasion of the Danube provinces, and in its later months we may date the siege of Aquileia and the sack of Opitergium, which are known from other authorities.²⁶ The demoralization caused by the famine, the plague, and the financial crisis greatly delayed all government measures, and it was not until the autumn of 167 that the emperors set out. In the meantime, however, the coins attest at least one victory, won by the generals on the spot. This victory gained the salutation IMP. V. from the soldiers, but it was not officially adopted, though it is without authority employed in inscriptions of this date. The emperors left Rome and advanced as far as Aquileia, the barbarians retiring before them. When Aquileia was reached the campaigning season must have been already over, and the winter was spent in that town. The victory over the barbarians seemed sufficiently decisive, and the title IMP. V. was definitely assumed by

²⁶ See Mommsen, *Prov.*, p. 210. Amm. Marcell, XXIX. vi. 1, “... obsessaque ab iisdem (Quadis) ac Marcomannis Aquileja, Opitergiumque excisum, et cruenta complura periclerī acta procinctu: viā resistente perinuptis Alpius Julius principis senio . . . Marco.” Note, however, that Marcus is mentioned as if sole emperor. Lucian mentions the narrow escape of Aquileia, as if it occurred during the Marcomannic war, but his chronology is very vague: *Alex.*, c. 48, εἴτα ἡκολούθησε τὰ περὶ Ἀκυληίαν γινόμενα, καὶ ἡ παρὰ μικρὸν τῆς πόλεως ἄλσις.

both emperors. Verus wished to regard the war as finished, and to return to Rome. Commentators have been anxious to fit in a "defeat" of the prefect Furius Victorinus, which, according to Capitolinus,²⁷ made Verus anxious to return. But Capitolinus' words are "*quod amissus esset Furius Victorinus, atque pars exercitus interisset. . .*" The words used are quite general, and would suit *at least* as well deaths from plague as destruction in war. If the plague was ravaging the army, Verus had good reason for desiring a speedy conclusion of hostilities. The loss of the prefect is mentioned in the Life of Marcus before the crossing of the Alps; in the Life of Verus,²⁸ the reluctance of the younger emperor alone is mentioned, without any reference to its motive. But the narrative in the Life of Marcus is so clearly a patchwork that the order cannot be trusted; and indeed the sequence of thought would be far better preserved if the passage referring to Furius Victorinus were taken out of its context, and the narrative made to run—"Lucius was reluctant to go farther, since the barbarians were already [in winter 167-8] sending in their submission; but Marcus distrusted them, and insisted on advancing beyond the Alps [in early spring 168]."²⁹ The reference to the loss of Victorinus might then be associated with Verus' *second* proposal to withdraw.

²⁷ *H. A.*, iv. 14, § 5.

²⁸ *Ibid.*, v. 9, §§ 7-8.

²⁹ *Ibid.*, iv. 14, §§ 4-8. The passage seems to read continuously thus: "*Lucius tamen invitus . . . veniam postulant. Marcus autem fingere barbaros . . . pertinebant.*" Then some reference to the second return to Aquileia seems to be wanted, parallel to that in *H. A.*, v. 9, § 10; then would follow, as in the Life of Verus, an account of Verus' motives in urging for a second time retreat. To this lost passage the reference to Victorinus may belong. Then in both narratives follows the account of the actual return (*H. A.*, iv. 14, § 7; v. 9, § 10 *fin.*).

Reluctantly, in the spring of 168, Verus accompanied his brother across the Alps. There is no evidence of serious fighting, either in the literary authorities or in the coins. The word used by Capitolinus in both Lives to describe the operations of this year is "*componere*."³⁰ The year was spent in the much-needed resettlement of the affected provinces and the fortification of the frontier towns of Italy and Illyricum.^{30a} On the conclusion of the war ("*bello composito*"), the emperors returned—to Aquileia obviously, for the return to Rome is related separately. The coins of this year bear witness to the conquest of the barbarians, the triumph of Rome, and the return of peace and plenty. The winter was spent at Aquileia, and Verus now carried his proposal to return to Rome. The emperors started together, Verus had an apoplectic attack, lingered for three days, and died at Altinum, a few miles west of Aquileia, on January 23, 169 P.C.

The second of Marcus' wars on the Danube, and the really important one, covers a period which practically coincides with his reign as sole emperor, between the death of Verus and the elevation of Commodus to the full powers and style of an Augustus. Its official name, as attested by inscriptions, and confirmed by coins, is, in its earlier stages, *Bellum Germanicum*, and in its later stages *Bellum Germanicum et Sarmaticum*. The literary authorities generally speak of *Bellum Germanicum*, or more loosely, *Bellum Marcomannicum*. Their accounts are much confused, and only in Dio can we detect the faintest traces of a chronology.

³⁰ *H. A.*, iv. 14, § 6; v. 9, § 10.

^{30a} Salonae was restored by detachments of the legions raised in 169 v. C. *I. L.*, iii. 1980 (170 P.C.).

Marcus clearly did not regard the victory already gained as conclusive. There is no evidence of a triumph, nor do any coins occur with the recognized types referring to the "pacification" of a territory, such as commonly mark the termination of a war of any importance. The operations of 166-169 had served only to give a temporary relief from the immediate pressure of barbarian invasion, a mere breathing-space in which to prepare for a serious attempt to re-establish the Northern frontier. The fearful embarrassments of the government in 169, and the desperate shifts resorted to in order to raise the necessary troops, are reflected in the narrative of the Life.³¹ The greater part of the year must have been spent in these measures, but the coinage of 169, subsequent to the death of Verus, clearly shows that before the end of the year the second Danubian war had commenced. The significance of the following coin is clear : ³²

Æ¹. *Obv.*—M. ANTONINVS AVG. TR. P. XXIII. Head r., laureate.

Rev.—COS. III. (upper margin) PROPECTIO AVG. (exergue) S. C. The emperor, bareheaded, wearing loric and *paludamentum*, on horse-back r., holding spear in r. hand ; he is preceded by a soldier wearing helmet, lorica, and boots, who walks r., looking back over his shoulder, and holds a spear in r. hand ; and he is followed by a similar figure walking r. ; in the background to l. are two more similar figures, merely indicated, one of whom bears a standard.

This is a variety of the already familiar *Profectio*-type. The *profectio* is mentioned in the Life.³³ This coin, which

³¹ *H. A.*, iv. 21, §§ 6-10.

³² Cf. Cohen, II. *M. A.*, 500 ; Eckhel, vii. p. 58.

³³ *H. A.*, iv. 20, § 6 ; 21, § 3.

is shown by the form of inscription to belong to the months succeeding the death of Verus, leaves no doubt that it took place before December, 169. But there is no trace of any warlike operations during this year. There are only two other fresh types of importance. The one is the type inscribed SALVTI AVG., to which reference has already been made. The health of Marcus was exceedingly feeble, and the sudden death of his colleague must have given rise to grave anxiety on behalf of the surviving emperor, and it is this anxiety which expresses itself in the appeal to the Health of the Emperor.⁸⁴ The other fresh type is as follows :—

Æ. Obv.—M. ANTONINVS AVG. TR P. XXIII. Head r., laureate.

Rev.—COS. III. Female figure wearing diadem, *χιτών* and *ἱμάτιον*, standing l., holding in l. hand *cornucopiae*, and with r. hand supporting short rudder.

This type is clearly one of Fortuna. It is not given by Cohen,⁸⁵ who has only a continuation of the type of last year inscribed FORT. RED. The present type differs from it in that Fortune is represented standing instead of seated. The change is not significant, but it shows that the type is a fresh one, and embodies an appeal to the good Fortune of the surviving emperor. The old Fortuna Redux had belonged to both; the new type emphasizes the beginning of a new state of affairs.

⁸⁴ It is evident that anxiety about his own life led the emperor to hasten on the marriage of Lucilla with Pompeianus (*H. A.*, iv. 20, § 6). It was urgently necessary that in case of the emperor's death some responsible person should be left as guardian of the youthful Caesar and regent of the Empire. The marriage was perhaps made the occasion of the *Congianum* celebrated on the coins bearing the legend LIBERAL. AVG. V, and the usual type (see Cohen, II. *M. A.*, 412).

⁸⁵ Cohen, II. *M. A.*, 136, is the same type in the following year

The coinage of 170 bears unmistakable testimony to a vigorous renewal of the war. Take first the following coin : ³⁶

*Æ*¹. *Obv.*—M. ANTONINVS AVG. TR. P. XXIIII. Bust r, laureate, loricate, with *paludamentum* on l. shoulder.

Rev.—COS. III. (upper margin) ADLOCVT. AVG. S. C. (exergue). Allocation scene: to the r. a platform, on which (a) the emperor wearing lorica, *paludamentum*, and boots, standing l., holding in l. hand spear or sceptre, and extending r. hand; (b) another figure (the praetorian prefect) similarly attired, standing l., holding spear in l. hand; off platform to l. three soldiers with lorica and cloak standing r., each holding standard.

This is the familiar group which regularly announces (as on Trajan's Column) the formal opening of a campaign. The next type takes us into the midst of the actual fighting. It is a fresh one, and fairly numerous in this year : ³⁷

Æ. *Obv.*—M. ANTONINVS AVG. TR. P. XXIIII. Head r., laureate.

Rev.—COS. III. Female figure wearing helmet, χιτών, and aegis, advancing rapidly r., holding shield on l. arm, and brandishing javelin with r. hand.

There is no difficulty in the identification. The Capitoline goddess Minerva, one of the Three who watched over the fortunes of Rome, has twice before appeared on the coins as the emperor's patroness, once as the Peace-bringer, and once simply standing in repose with her shield lowered and the owl on her hand. Here

³⁶ Cf. Cohen, II. *M. A.*, 1.

³⁷ Not in Cohen; described from specimen at Berlin.

the warrior goddess is fighting the emperor's battles. Minerva Bellatrix we may appropriately call the type in distinction from Minerva Pacifera. The results of the fighting are indicated by a group of Victory-types. Besides the common types of Victory bearing a palm-branch and wreath,³⁸ and Mars (Pater) bearing a trophy,³⁹ there is a numerous issue of coins with a new form of Victory-type as follows: ⁴⁰

R. Rev.—VICT. AVG. COS. III. Victory, wearing diadem and χιτών, advancing l., holding in r. hand wreath, and over l. shoulder trophy.

There is also a Roma type for this year ⁴¹—

R. Rev.—COS III. Female figure in helmet, χιτών, and ἰμάτιον, seated l., holding in l. hand sceptre, and laying r. hand on ~~the~~ ^{foot} resting on ground—

but it does not exhibit any direct allusion to the war. Nor are there any other fresh types of this year having any such reference. The *Profectio* coins are probably mere repetitions of those of the previous year.⁴²

In the coinage of this year, therefore, we have a complete record of the beginning, progress, and close of a successful campaign. Yet no imperatorial title appears. Clearly the successes won were not regarded as decisive, and the emperor refused to allow them to be celebrated by a new *salutatio*.

The sixth *salutatio* appears during the next year. This,

³⁸ Not in Cohen.

³⁹ Cf. Cohen, II. *M. A.*, 910.

⁴⁰ Cf. *Ibid.*, II. *M. A.*, 980; Eckhel, vii. p. 39; the other Victory-type, Cohen, 138, may be simply repeated from the previous year.

⁴¹ Cf. *Ibid.*, II. *M. A.*, 131.

⁴² See *Ibid.*, II. *M. A.*, 502. There seems to be something wrong about No. 501, which gives Marcus a companion.

the twenty-fifth tribunician year of Marcus, and the eleventh year of his reign, is marked by a very large issue of coins celebrating the *Decennalia*.⁴³ These coins, numbering in the Berlin Collection 22 out of a total for the year of 56, bear (most, if not all) the obverse inscription IMP. M. ANTONINVS AVG., and no imperial inscription on the reverse. Strictly, therefore, they supply no evidence as to the number of the imperial title, but in all probability they belong to the period before the assumption of IMP. VI. Allowance must be made for this large exceptional issue, in attempting to approximate to the date of the change from the proportions of the coins. The proportions, for the Berlin Collection, are as follows:—

Without IMP. VI.	:	:	:	:	49	} 56
With IMP. VI.	:	:	:	:	7	

Even after making the necessary allowance, it is clear that the new title was assumed late in the year. This points to a long campaign occupying practically the whole year. This time we are not left without an explanation of the title (as was the case with IMP. V.), for in this year appears a type closely parallel to those which commemorated the Oriental victories of earlier years:⁴⁴

Æ¹. *Obv.*—M. ANTONINVS AVG. TR. P. XXV. Head r., laureate.

Rev.—IMP. VI. COS. III. S. C. Victory, nude to waist, wearing diadem and *χιτών*, standing r., supporting with l. hand shield resting on palm-tree; the shield is inscribed VIC.
GER.

⁴³ See Cohen, II. *M. A.*, 1030 *sqq.*, 491 *sqq.*; Eckhel, vii. p. 59.

⁴⁴ Cf. Cohen, II. *M. A.*, 267; Eckhel, vii. p. 59.

The new *salutatio*, therefore, is given, quite definitely, in consideration of a victory over the Germans. Another fresh Victory-type which appears along with IMP. VI. is a slight variation of a common form : ⁴⁵

R. Rev.—IMP. VI. COS. III. Victory wearing diadem and χιτών, seated l., holding in l. hand palm, in r. hand wreath or *patera*.

The remaining types of the year occur without IMP. VI. The majority of these are repeated from 170, but at least one new Victory-type appears before the sixth *salutatio* : ⁴⁶

R. Obv.—M. ANTONINVS AVG. TR. P. XXV. Head r., laureate.

Rev.—COS. III. Female figure in helmet and χιτών, seated l. on lorica, l. foot resting on an object which may be only a footstool, holding in l. hand spear, in r. hand Victory.

The figure evidently represents Rome, but the type differs from the Rome of 170. The military character is here much more definite, and the introduction of the figure of Victory justifies us in calling the type *Roma Victrix*, though it is not identical with the similar types of 165 and 169. Possibly the coin was struck to commemorate some incidental success in the campaign of 171. It is at any rate a fresh type, and it is fairly numerous, for if we leave out of account the coin of the *Decennalia*, the *Roma Victrix* coins are in the proportion of „ $\frac{6}{10}$ “ of the total number of coins for the first part of 171 in the Berlin Collection. The other Victory-types,

⁴⁵ Not in Cohen.

⁴⁶ Cohen, II. *M. A.*, 279, seems to describe this type with the legend IMP. VI. ; I know it only without the imperial title.

representing Victory bearing a trophy,⁴⁷ Victory walking, with palm and wreath,⁴⁸ and the type of Mars (Pater) bearing a trophy,⁴⁹ are repeated from the previous year, as is also that of Minerva Bellatrix.⁵⁰ But another of the Capitoline Triad, and a greater than Minerva, appears on a fairly numerous issue of coins for this part of 171 : ⁵¹

Æ¹. *Obv.*—M. ANTONINVS AVG. TR. P. XXV. Head r., laureate.

Rev.—COS. III. S. C. Jupiter, nude to waist, cloak hanging at back from shoulders and falling over knees, seated l. with feet on footstool, holding in l. hand sceptre, in r. hand *fulmen*.

This is the familiar representation of the great god of the Capitol. He is not yet drawn, like Minerva, into the combat itself, though two years later we shall find him there. The present type is in conception like that of the Minerva of 168, a simple appeal to the majesty of the god who is the protector of Rome.

The two years 170–171, then, have been occupied with practically continuous fighting against German tribes, concluding victoriously at the close of 171. The year 172 shows no fresh salutation, though it has a considerable crop of coins having reference to a victory. I will give a list of these at once, and attempt to ascertain from them the general character of the fighting during this year. The three forms of Victory-type,⁵² the Roma

⁴⁷ Cf. Cohen, II. *M. A.*, 983.

⁴⁸ Cf. *Ibid.*, l.c. 260.

⁴⁹ Cf. *Ibid.*, II. l.c. 126.

⁵⁰ Not in Cohen, but three examples at Berlin.

⁵¹ Cf. Cohen, II. *M. A.*, 113.

⁵² See Cohen, II. *M. A.*, 265, 270, 914. The seated Victory is also found, although not given by Cohen.

Victrix,⁵³ and the trophy-bearing Mars⁵⁴ which are repeated from 171, may be passed over. Then we have two more Mars coins. The first I describe from a specimen at Berlin:⁵⁵

Æ. Obv.—M. ANTONINVS AVG. TR. P. XXVI. Head r., laureate.

Rev.—IMP. VI. COS. III. Warrior in helmet, lorica, short cloak, and boots, standing r., holding in r. hand spear with point downwards, and laying l. hand on shield.

This is the same type which I have discussed among the coins of 164–165, and identified as Mars Ultor resting at the close of a successful war. The other I have not seen, but transcribe from Cohen:⁵⁶

Æ¹. Obv.—M. ANTONINVS AVG. TR. P. XXVI. Bust r., laureate.

Rev.—MARTI VICTORI IMP. VI. COS. III. S. C. Mars standing r., half nude, holding shield resting on captive (?), with inscription S. C. and spear.

This is an entirely new type, differing indeed but little from the previous one, but sufficiently explained by the inscription. Then we have a new Roma type:

Æ¹. Obv.—M. ANTONINVS AVG. TR. P. XXVI. Head r., laureate.

Rev.—IMP. VI. COS. III. S. C. Female figure in helmet, χιτών and ἱμάτιον, seated l. on lorica, holding in r. hand spear or sceptre, l. arm resting on round shield, which rests on two other shields, one round and one hexagonal.

This type does not seem to be given in Cohen, but it is

⁵³ See Cohen, *l.c.* 280; this type is, however, not quite identical.

⁵⁴ See *Ibid.*, *l.c.* 913.

⁵⁵ Cf. *Ibid.*, II. *M. A.*, 290.

⁵⁶ *Ibid.*, II. *M. A.*, 431.

fairly common among the coins at Berlin, and is clearly to be distinguished from the Roma Victrix of last year. The figure of Victory is not here present, but the idea of conquest is sufficiently conveyed by making Rome sit upon a pile of arms—the spoils of the barbarians.

In addition to these, the coins of this year include a new type introducing the figure of Victory, but of a different character from the simple Victory-types of last year. I describe a fine gold coin in the British Museum : ⁵⁷

Æ. *Obv.*—M. ANTONINVS AVG. TR. P. XXVI. Bust r., laureate, loricate, paludate.

Rev.—IMP. VI. COS. III. The emperor, wearing lorica and boots, standing l., holding in r. hand *fulmen*, in l. hand upright spear (which passes through small ball); behind him Victory advancing l., holding palm-branch in l. hand, and with r. hand placing wreath on emperor's head.

This type represents the Victory who commonly appears on the coins with her palm and wreath, laying the wreath on the head of the victorious emperor. He holds the *fulmen*, the proper attribute of Jupiter. We may compare the relief on the Arch of Trajan at Beneventum, where the returning emperor is greeted by the god of the Capitol, who offers him the *fulmen*.

Finally, we have another type recalling those of the Oriental campaigns, and defining more closely the effect of the successes in war celebrated on the other coins. I describe the type after Cohen : ⁵⁸

*Æ*¹. *Obv.*—M. ANTONINVS AVG. TR. P. XXVI. Head r., laureate.

⁵⁷ Cf. Cohen, II. *M. A.*, 308.

⁵⁸ *Ibid.*, II. *M. A.*, 215 sq. Eckhel (vii. p. 60) gives this type for 173.

Rev.—GERMANIA SVBACTA IMP. VI. COS. III. S. C.
Germany, weeping, seated l. at foot of trophy,
surrounded by shields.

The year, as I have said, is without a fresh *salutatio*. There was evidently some fighting; the question is as to its character. It must have been one of two things: either the first stage of a fresh war, successful but so far inconclusive, or the exulting warfare winding up

this title in their inscriptions until the next year, but there is no real conflict, as will appear from the character of the coins in question. There are only two such coins, and in each case the title occurs only on the reverse. As they are probably to be associated with events of the current year 172, I will give them at once. The first is a medallion of Marcus and Commodus :⁵⁹

Obv.—M. ANTONINVS AVG. TR. P. XXVII. Bust r., laureate and loricæ.

Rev.—COMMODOVS CAESAR GERM. ANTONINI AVG. GERM. FIL. Youthful bust r., loricæ and paludate.

Here the title seems to be introduced merely for the sake of Commodus. The other is a bronze coin, examples of which are fairly numerous :⁶⁰

Obv.—M. ANTONINVS AVG. TR. P. XXVII. Head r., laureate.

Rev.—GERMANICO AVG. IMP. VI. COS. III. S. C. (exergue). Trophy ; at base three shields, two hexagonal, leaning against trophy on r. and l. respectively ; the third round, at the back of the trophy ; to r., German captive, male, with slight cloak over l. shoulder, standing r. with hands behind back ; to l. German captive woman, nude, seated l. on one of the hexagonal shields, in attitude of grief.

POTESTATIS XXVI. IMP. V. (*sic*!) P. P. | COS. III. PROCOS. | COLONIA VLPIA TRAIAN. AVG. DAC. | SARMIZEGETVSA. The titles are used in a somewhat erratic manner, but the inscription is evidence of the use of the title Germanicus in this year. IMP. V. is a "misprint" PROCOS. shows that the emperor was on the Danube. The Life of Commodus relates that the title Germanicus was assumed on October 15, 172 ; v. *H. A.*, VII. xi. 14.

⁵⁹ Cf. Cohen, II. *M. A. et Comm.*, 2, cf. 1, 3, 4. Eckhel (vii. p. 59) gives this medal for 172, as well as for 173 (p. 60).

⁶⁰ Cf. Cohen, II. *M. A.*, 227. Eckhel (vii. p. 59) gives this coin for 172, as well as for 173 (p. 60).

The type is clearly akin to the Germania Subacta of 172, and like it recalls types of the Oriental war. It seems, therefore, almost certain that its reference is to the "subjugation of Germany" celebrated in the coins this year. It is obviously intended to explain the assumption of the title Germanicus, just as the analogous type was used to justify the title Armeniacus. So far as it goes, therefore, it tends slightly to confirm the inscriptions, rather than to contradict them. But these exceptional coins are sufficient to show that for some reason or other the title Germanicus was not officially adopted into the regular style of the emperor on the coins. In 174, again, it never appears on the coins, so that the fact of its absence in 172 proves nothing. We can, therefore, accept without misgiving the evidence of inscriptions as to the assumption of the title Germanicus in the present year. This, combined with the evidence of the coins, enables us to form a fairly clear idea of the state of affairs. The years 171-172 are occupied with a continuous war, compact and complete in itself, consisting of a successful but inconclusive campaign followed immediately by a second and decisive campaign, and a year given to the "pacification" of the enemy's territory. The name of the war, as we should gather it from the coins, would be "*Bellum Germanicum*." Can the area of the war be fixed, and can it be identified with any of the events chronicled in the literary authorities? The assumption of the title Germanicus gives the clue. Dio⁶¹ records it in immediate connexion with his account of the defeat of the Marcomanni, which is the

⁶¹ *Epit. Dion. Cass.*, lxxi. 3. τῶν δὲ Μαρκομάνων εὐτυχησάντων, κ.τ.λ. . . . κρατήσας δὲ αὐτῶν, Γερμανικὸς ὠνομάσθη. Γερμανοὺς γὰρ τοὺς ἐν τοῖς ἄνω χωρίοις οἰκοῦντας ὀνομάζομεν.

first episode in his account of the war. The Life⁶² is innocent of chronology, but when it makes a distinction between the general successes of the emperor "*contra Germanos*" and the "*speciale bellum Marcomannicum*," the war meant in the original source may have been this three years' war. Elsewhere this writer speaks of "*Germanicum et Marcomannicum bellum*"⁶³ or of "*bellum Germanicum sive Marcomannicum*,"⁶⁴ It seems very probable that this war, the most critical and important stage of the great conflict on the Danube, has overshadowed the rest of the operations in the historical records, and its name has come to be used in a loose and general sense. It is the only war of this period in Eutropius,⁶⁵ who speaks of a war waged against the Marcomanni from Carnuntum as a base, for three years continuously. The *juge triennium* is 170-172. It would appear, however, that the fighting was not all on the one line, for Fronto is recorded⁶⁶ to have fallen in 170 fighting against the Germans and Iazyges, and operations in that region might be suggested by the Dacian inscription quoted above, which at any rate shows that the Dacian provinces were clear of the enemy as far north as Sarmizegethusa in 172. Probably a parallel advance through the territory of the Iazyges protected the right

⁶² *H. A.*, iv. 17, §§ 1-2.

⁶³ *Ibid.*, iv. 21, § 8.

⁶⁴ *Ibid.*, iv. 22, § 7.

⁶⁵ Eutrop. *Epit.*, viii., 13.

⁶⁶ *C. I. L.*, vi. 1377. M. CLAUDIO F. Q. FRONTONI . . . AVCTORE(M) IMPERATORE(M) AVRELIO ANTONINO AVG. ARMENIACO MEDICO PARTHICO MAXIMO QVOD POST ALIQVOT SECVNDA PROELIA ADVERSVM GERMANOS ET IAZYGES AD POSTREMVM PRO. R. P. FORTITER PVGNANS OECIDERIT. . . . The date of his death is deduced from *C. I. L.*, iii. 7505, from which it appears that Cornelius Clemens succeeded him as governor of Dacia in 170.

flank of the main advance against the Marcomanni and their immediate allies. In this case the Iazygian campaign which in Dio⁶⁷ follows the Marcomannic, and is mentioned in the same sentence with it where the results of the war are summed up to the commencement of the campaign ἐπὶ τοὺς καλομένους Κουάδους,⁶⁸ becomes an integral part of the Marcomannic War.

If this view of the nature of the three years' war be correct, it might be possible to suppose that the victory over the Marcomanni *in ipso transitu Danuvii* recorded in the Life⁶⁹ is the same incident as that recorded with more precision by Dio⁷⁰ as a victory won over the Iazyges on the frozen river. Eckhel⁷¹ saw a memorial of the victory "at the crossing of the Danube" in the following coin of 172, which I transcribe from Cohen :

Æ¹. *Obv.*—M. ANTONINVS AVG. TR. P. XXVI. Head r., laureate and paludate.

Rev.—VIRTVS AVG. (exergue) IMP. VI. COS. III. (margin) S. C. The emperor crossing the Danube bridge l., followed by five soldiers, the first and the third bearing standards, the fourth on horseback holding spear, the fifth on foot holding spear; beneath the bridge three boats.

If Eckhel's attribution is right, the identification suggested above is of course untenable. But I incline rather to give a more general significance to the Virtus type. It would hardly suggest, in itself, a particular victory won "*in ipso transitu Danuvii*." It seems more

⁶⁷ *Epit. Dion. Cass.*, lxxi. 7.

⁶⁸ *Ibid.*, lxxi. 8 ad init.

⁶⁹ *H. A.*, iv. 21, § 10.

⁷⁰ *Epit. Dion. Cass.*, lxxi. 7.

⁷¹ Eckhel, vii. p. 60; cf. Cohen, II. *M. A.*, 999, 1000.

natural to find in it a summary of the achievements of the war. The Valour of the Emperor has made the Danube a Roman stream. The river no longer sets a bound to the power of the empire. Trajan's Danube bridge was the prelude to the annexation of Dacia, so Marcus' Danube bridge symbolizes the establishment of Roman power in Marcomannia, and points, in fact, in the direction of the full annexation, which the emperor contemplated later.

There remains one important type of 172 relating to the war which has not yet been discussed. I describe after Cohen a large bronze medallion of this year : ⁷²

Obv.—IMP. CAES. M. ANTONINVS AVG. TR. P. XXVI.
COS. III. Bust r., laureate, loricate, and paludate.

Rev.—ADLOCVTIO (exergue). The emperor l., with *praef. praet.* and another, addressing five soldiers with standard and eagles.

The *Allocutio* usually marks the opening of a campaign. Such may be its intention here. Yet the character of this closing campaign was probably too informal and irregular to make this quite plausible. Were it not for the overwhelming evidence already produced which goes to show that this year's campaign closed a war, the type would strongly have suggested the opening of a new war. It may indeed mark the opening of the new war entered upon in 173, if we can suppose that the movement of troops from Carnuntum to the new base took place before the winter. But the *Allocutio* is not absolutely confined to the opening of a campaign. It

⁷² Cohen, II. *M. A.*, 2.

is used at least once on Trajan's Column to mark the close of a campaign. In association with the numerous types of this year commemorating the completion of the war, the present type may quite probably be meant to mark in a solemn and formal way the conclusion of what was clearly regarded as a very critical and decisive conflict. This is perhaps the best way of regarding this medallion. Otherwise it might be possible to bring it into some connexion with another type, very similar in form to the *Allocutio* which occurs on large bronze coins of this year:⁷³

Æ¹. *Obv.*—M. ANTONINVS AVG. TR. P. XXVI. Head r., laureate.

Rev.—PROVIDENTIA AVG. (exergue) IMP. VI. COS. III. (margin) S. C. To r. of field, platform, on which emperor wearing lorica and boots, standing l., holding baton in r. hand, and another figure, behind him, similarly attired, standing l.; to l., off platform, four soldiers, of whom the one nearest to the platform stands l., holding standard in r. hand and wearing shield on l. arm; the next stands r., holding spear in r. hand; the third stands r., somewhat in the background, holding a spear or a standard; and the fourth stands r., holding horse's head by the bridle.

Cohen, with much probability, regards this scene as commemorating the presentation of Commodus to the army. The emperor "provides for" the succession.

Before leaving this *triennium* I must pause to consider certain types which I passed by in tracing the course of the war. There are two companion types of 171 which

⁷³ Cf. Cohen, II. *M. A.*, 529, and note *ad loc.*

I describe, the first from a coin in the British Museum, the second from one at Berlin : ⁷⁴

*Æ*¹. *Obv.*—IMP. M. ANTONINVS AVG. TR. P. XXV. Head r., laureate.

Rev.—CONCORDIA EXERCITVVM (margin) COS. III. (exergue) S. C. Female figure wearing diadem, *χιτών*, and *ἰμάτιον*, standing l., holding military standard in each hand.

*Æ*¹. *Obv.*—IMP. M. ANTONINVS AVG. TR. P. XXV. Head r., laureate.

Rev.—FIDES EXERCITVVM (margin) COS. III. (exergue) S. C. Female figure wearing diadem, *χιτών*, and *ἰμάτιον*, standing l., holding in r. hand Victory, and supporting with l. hand military standard.

Both these coins belong to the earlier part of the year, before the victorious close of the campaign. In the trying circumstances of the time, before the success of the war was assured by the victory of 171, the "harmony" and "loyalty" of the troops must have been a matter of great anxiety, and this may be sufficient to account for the types. But one is inclined to seek some more definite ground for the appearance of so marked a pair of types at this particular point in the war. It is certainly a curious coincidence that among the new troops raised for this war was the *Legio III Concordia*. The companion legion raised at the same time was the *Legio II Pia*.⁷⁵ This legion, however, is known to have

⁷⁴ Cf. Cohen, II. *M. A.*, 66, 199.

⁷⁵ Both are mentioned in *C. I. L.*, iii. 1980, an inscription found at Salona, and dated TR. POT. XXIII. *C. I. L.*, iii. 5187, gives the second legion the titles PIA FIDELIS. (211 P.C.).

borne, in the time of Caracalla, the full title *Legio II Pia Fidelis*. These new troops would be those for whose "loyalty" and "harmony" most anxiety would be felt, and this might well be indicated in their names, and reflected in a series of coins struck specially in their honour. Unfortunately, however, there is no evidence of the Second Legion having borne at this time the title *Fidelis*, and if this is not so, the coincidence loses much of its force. Moreover, the two legions were raised in 169, so that this hypothesis is not a very good one to explain the appearance of the *Concordia* and *Fides* types in 171. I incline to a different explanation. It seems natural to suppose that the types would be called for by some quite special strain upon the good behaviour of the army at that particular time. The types are, in fact, frequently used at times when there is dissension and disloyalty among the troops, as an appeal, one might say, to their abstract "fidelity" and "harmony" against temporary aberrations. Just as *Salus* types appear during a time of plague, so *Fides* and *Concordia* types occur in times of revolution. The types of *Fides Militum* and *Fides Exercituum*⁷⁶ are particularly common on the coins of three out of four of the rival emperors of 69-70 p.c. *Fides* and *Concordia* coins occur again during the present reign at the time of the revolt of Avidius Cassius.⁷⁷ There is a further coincidence; these coins of 175 are followed in 176 by *Clementia* coins,⁷⁸ celebrating the emperor's mercy to his conquered enemies. So in the present case, after the *Fides* and *Concordia* of 171,

⁷⁶ See Cohen, I. *Galba*, 69; *Vitellius*, 30 *sqq.*, 37; *Vespasian*, 159 *sqq.*

⁷⁷ See Cohen, II. *M. A.*, 60, 337.

⁷⁸ See *ibid.*, II. *M. A.*, 28.

comes the following coin of 172 (described after Cohen):⁷⁹

Æ¹. *Obv.*—M. ANTONINVS AVG. TR. P. XXVI. Head of emperor r., laureate.

Rev.—CLEMENTIA AVG. IMP. V. COS. III. S. C. Emperor in toga, standing, holding spear, resting r. elbow on shield; before him, half-nude figure.

The combination seems to me irresistible evidence of a revolt or serious disturbance in some part of the empire about this time. It is quite likely that such a time, just after the death of the emperor Verus, when his surviving colleague, reputed to be no soldier, was embarrassed and almost overwhelmed by the combined weight of famine, pest, and a dangerous war, should have been chosen by a disloyal governor for an attempt at revolt. That other revolts besides that of Cassius took place is certainly to be expected, and indeed we are accidentally in possession of some slight presumptive evidence for one. On two Numidian inscriptions⁸⁰ of 167 the name of the governor who set them up is erased. This looks like a case of *memoria damnata*. Some one, therefore, who governed Numidia in 167 was probably involved in treason at a later date. It cannot be Cassius himself, for at that date he had just entered upon his government of Syria. It might of course be some governor who supported him, but it might equally well be a person who independently rose in revolt against the emperor. And there is no reason why this revolt may not have taken place in 170–172, and be the very

⁷⁹ Cohen, II. *M. A.*, 27.

⁸⁰ *C. I. L.*, viii. 4208 and 4593, both dated to Marcus' twenty-first tribunician year.

one we have suspected from the coins. I do not lay stress on this very conjectural identification, but the epigraphic evidence shows at least the possibility of a revolt unnoticed by the historians, and the evidence of the coins seems to be all but conclusive for a sedition of some kind between 170 and 172.

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(To be continued.)

VIII.

TABLES OF BULLION COINED UNDER EDWARD I, II, AND III.

THE following tables were drawn up by the late Mr. Arthur Hughes and ourselves from the enrolled accounts of the Warden of the Mint at the Public Record Office, for the purpose of showing the actual quantities of pence, halfpence, and farthings coined in each year of Edward I, II, and III.¹

The tables are three in number. The first relates to the silver coinage issued from the Mint of London; the second to the silver coinage issued from the Mint of Canterbury and the less important provincial mints; the third deals with the gold coined at London and Calais. As far as the silver is concerned it will be sufficient to describe in full the tables dealing with the Mint of London; in the other tables most of the columns are only repetition.

The table showing the silver coined in London consists of ten columns. The first contains the reference to the membrane of the Pipe or Foreign Roll containing the account described; the second and third columns show the period over which the account extends and

¹ Since these tables were prepared about twelve years ago, some of the items have been published by Messrs. Fox in the *Brit. Num. Journal*, but it still seems worth while to print them *in extenso*.

the name of the warden or other accountant. The fourth column gives the amount of bullion received by the mint; this sum is reckoned in pounds, shillings, and pence, weight; and up to June 2, 1349, it is the weight of silver actually received without any allowance for variations in standard. The fifth column shows the total poundage charged to cover mintage, seignorage, etc. The sixth column contains the amounts of coin issued from the mint, reckoned in weight of the legal standard. The seventh column gives the rate per pound charged on this output for mintage, reckoned in pence tale; the eighth shows the seignorage charged on each pound of bullion received into the mint, reckoned in pence weight; and the ninth gives the number of pence tale into which the pound weight was coined on the average during the period in question. The names of the wardens, when English, are left as they appear on the roll, but an attempt has been made to put Italian names into a more presentable form than that in which they appear there.

The varying form of account employed has not enabled all these columns to be filled up; it would often be possible to do this by inference or from some other source, but as it was found that the results of different methods were not always in agreement, it has been thought best to adhere to the one authority and avoid conjecture. A brief description of the varying forms of account employed is here appended as an additional illustration of the table.

From 1272 to 1278 the warden debits himself with the seignorage and with the increment on this needed to convert it from weight to tale; and credits himself with miscellaneous wages and expenses.

From April 29, 1279, he debits himself with a sum made up of the mintage, seignorage, and an extra sum of 3*d.*, all reckoned in tale; and credits himself with the mintage due to the master moneyer. A difference is made between the charges on English silver and silver from abroad, described as coming from Bruges, Ghent, or Brussels, or as Baudekin silver; and the mintage on farthings differs from that on pence coined.

On February 24, 1281, the extra charge of 3*d.* was surrendered; the total deduction is then reckoned in weight and an increment of 8*d.* in the pound taken on it to convert it into tale.

On the 18th of April following the first system, by which the warden debits himself with the seignorage only, comes again into force and continues until May 28, 1285.

From that date the warden once more debits himself with the total deduction reckoned in weight and credits himself with the mintage. This method then continues without change through the remainder of the table.

One more change must be noticed. Up to May 8, 1335, the bullion received into the mint—as has been said—was reckoned in weight as received, whatever the fineness of it might be. From that date the amount received is noted in the same way, but a note is also made of the amount of alloy added and the total deduction is charged upon that also. From June 2, 1349, the amount received is always the same as the amount coined, and both are reckoned in weight at the English standard.

In the table dealing with the gold coinage the same columns are employed as in the silver tables with the

exception that, as the amount coined is always the same as the amount received, it was not necessary to fill up both columns. Both are always reckoned in weight of pure gold; the accounts give the weight of the gold before it was refined, but it has not been thought needful to give this. The total deduction and mintages are in money of account not in weight of gold.

C. G. CRUMP.

C. JOHNSON.

TA
SILVER

Reference.	Date.	Warden.	Bullion purchased.			T de t
P. 1 Edw. I, 7	20 Nov., 1272, to 20 Nov., 1273	Bartholemew de Castello	£ 6,544	s. 1	d. 7	
P. 2 Edw. I, 18	20 Nov., 1273, to 24 June, 1274	„	10,230	1	11	
P. 3 Edw. I, 20	25 June, 1274, to 24 June, 1275	„	7,894	10	10	
P. 6 Edw. I, 28	25 June, 1275, to 29 Nov., 1278	„	60,161	9	9	
P. 15 Edw. I, 3	28 April, 1279, to 20 Nov., 1279	Gregory de Rokesle and Orlandino di Poggio	83,107	11	8 E.S.	1
			10,225	16	4 F.S.	1
„	20 Nov., 1279, to 1 Jan., 1280	„	3,876	12	5 E.S.	1
			400	0	0 F.S.	1
			1,112	3	8 F.S.	1
			9,144	0	10 E.S.	1
„	1 Jan., 1280, to 18 May, 1280	„	4,930	0	0 F.S.	1
			63,332	10	8 E.S.	1
			5,469	0	0 F.S.	1
„	18 May, 1280, to 18 Oct., 1280	„	79,996	4	1 E.S.	16
			14,297	16	1 F.S.	17

I.

LONDON.

Amount issued.			Mint- age.	Seignor- age.	Pence in lb.	Remarks.
£	s.	d.	d.	d.		
—	—	—	—	6	242	
—	—	—	—	6	242	
—	—	—	—	6	242	
—	—	—	—	6	242	
92,688	5	9 pence	10	<i>d. d.</i> 6+3	242 $\frac{3}{4}$ to 243	E.S. is English Silver; F.S. is Foreign Silver.
	—	farthings	8			
}	3,877	2 0 pence	10	6+3	243	The first two lots of bullion were purchased and coined while Master Albert was Master Moneyer; the remainder during the administration of William de Turnemire de' Marcelli. The mint of Bury St. Edmunds is mentioned.
			8			
			8			
}	10,000	0 0 pence	10			
			10			
10,899	0	0 pence	5 $\frac{1}{2}$	—	243	See Indenture with William de Turnemire, <i>loc. cit.</i> The account mentions the following provincial mints as at work under W. de Turnemire, viz. Bristol and York. There are no accounts for these Provincial Mints because W. de Turnemire had them to farm.
35,961	0	0 halfpence	7			
5,060	0	0 farthings	10			
14,861	13	7 pence	5 $\frac{1}{2}$		243	The account mentions mints at work at Newcastle and Lincoln.
88,058	6	5 pence	7			
2,690	0	0 halfpence	9			
740	0	0 farthings	11 $\frac{1}{4}$			
2,260	0	0 farthings	10 $\frac{1}{2}$			

SILVER—

Reference.	Date.	Warden.	Bullion purchased.			Total deduction.
			£	s.	d.	d.
P. 15 Edw. I, 3	18 Oct., 1280, to 24 Feb., 1281, and 24 Feb., 1281, to 13 April, 1281	Gregory de Rokesle and Orlandino di Poggio	29,321	5	1 E.S.	19
			1,546	2	8 F.S.	17½
			7,376	13	1 E.S.	16
			2,902	9	6 F.S.	14½
"	13 April, 1281, to 15 July, 1281	"	14,582	18	11 E.S.	—
			15,887	2	8 F.S.	—
"	15 July, 1281, to 29 Sept., 1281	Gregory de Rokesle	4,726	16	10 E.S.	—
			5,329	11	4 F.S.	—
P. 15 Edw. I, 2	30 Sept., 1281, to 21 Oct., 1283	"	33,573	15	0 E.S.	—
			44,448	1	6½ F.S.	—
"	21 Oct., 1283, to 20 May, 1285	"	11,359	17	1½ E.S.	—
			26,222	4	6 F.S.	—
P. 14 Edw. I, 4	20 May, 1285, to 15 Aug., 1286	"	29,106	19	9 E.S.	16
			42,387	4	0 F.S.	14½
	15 Aug., 1286, to 15 June, 1287	"	4,710	16	11 E.S.	16
"		"	41,551	17	7 F.S.	14½
	15 June, 1287, to 3 Nov., 1287	"	3,032	4	8½ E.S.	16
P. 16 Edw. I, 28		"	19,532	13	6 F.S.	14
	3 Nov., 1287, to 3 Nov., 1288	"	3,813	14	6½ E.S.	16
P. 18 Edw. I, 1		"	33,017	17	1½ F.S.	14
	3 Nov., 1288, to 17 April, 1290	"	4,045	16	5½ E.S.	16
			11,555	1	9 F.S.	14

LONDON—*continued*.

Amount issued.				Mint- age.	Seignor- age.	Pence in lb.	Remarks.
£	s.	d.		d.	d		
4,592	13	5	pence	5½		242½ to 243	The first four issues of coin run from 18 Oct., 1280, to Christmas, 1280; the last three from Christmas to April. Provincial mints mentioned are Chester, Lincoln, Bristol, York, and Durham.
25,833	5	8	pence	7			
860	0	0	halfpence	9			
2,230	0	0	farthings	11¼			
12,804	0	11	pence	6½			
225	0	0	halfpence	8½			
1,180	0	0	farthings	10¾			
29,960	0	0	pence	—	9	243	Account rendered "deducto monetagio." Provincial mints mentioned are Bristol, Lincoln, York, Newcastle, Durham, and Bury St. Edmunds.
280	0	0	halfpence	—	9½		
1,400	0	0	farthings				
10,370	0	0	pence		9½	243	The mint of Lincoln is mentioned.
960	0	0	halfpence		9		
690	0	0	farthings				
—					9½	243	The following provincial mints are mentioned. Lincoln, Durham, and Bury St. Edmunds.
					9		
—			pence		10	243	
			halfpence		9		
			farthings				
28,467	19	9	pence	6		243	In this account the alloy added is stated separately and mintage charged on it. Brabant silver included with English.
42,387	4	0	"	5½			
490	0	0	halfpence	7½			
150	0	0	farthings	9¼			
1,354	11	2	alloy	5½			
42,890	0	0	pence	5½		243	New Indenture with Peter Bertin de Turnemire lowering mintage on English silver to 5½d.
250	0	0	halfpence	7½			
45	0	0	farthings	9¼			
25,910	0	0	pence	5½		243	
156	0	0	halfpence	7½			
168	3	9	farthings	9¼			
36,690	0	0	pence	5¼		243	
210	0	0	halfpence	7¾			
80	0	0	farthings	9			
15,780	0	0	pence	5¼		243	
120	0	0	halfpence	7¼			
445	0	0	farthings	9			

SILVER—

Reference.	Date.	Warden.	Bullion purchased.			Total deduction.
			£	s.	d.	d.
P. 18 Edw. I, 1	17 April, 1290, to 14 July, 1290	Gregory de Rokesle	282	7	1 E.S.	16
			4,598	4	8 F.S.	14½
P. 19 Edw. I, 55	15 July, 1290, to 14 July, 1291	"	957	8	0 E.S.	16
			1,218	19	6 F.S.	11½
P. 27 Edw. I, 23	2 Sept., 1291, to 29 Sept., 1292	William de Wi- mundham	2,368	7	11 E.S.	16
			2,689	16	11 F.S.	11½
"	30 Sept., 1292, to 29 Sept., 1293	"	928	16	7 E.S.	16
			2,166	2	9 F.S.	11½
"	30 Sept., 1293, to 29 Sept., 1294	"	2,723	3	8 E.S.	16
			1,020	6	8 E.S.	—
			3,953	13	7 F.S.	11½
"	30 Sept., 1294, to 29 Sept., 1295	"	3,772	18	3 E.S.	16
			1,900	8	10 F.S.	11½
"	30 Sept., 1295, to 29 Sept., 1296	"	3,474	10	6 E.S.	16
			1,145	11	2 F.S.	11½
"	30 Sept., 1296, to 6 Nov., 1296	"	333	18	8 E.S.	16
			729	10	3 F.S.	11½
P. 27 Edw. I, 24	2 Dec., 1296, to 29 Sept., 1297	Peter de Leicester	4,664	10	5 E.S.	16
			1,110	5	2 E.S.	—
			1,682	17	3 F.S.	11½
"	30 Sept., 1297, to 14 Oct., 1298	"	1,636	19	1 E.S.	16
			405	2	9 F.S.	11½
P. 33 Edw. I, 44	15 Oct., 1298, to 29 Sept., 1299	John de Sandale	687	12	0 E.S.	16
			13,009	16	0 F.S.	11½

LONDON—*continued*.

Amount issued.				Mint- age.	Seignior- age.	Pence in lb.	Remarks.
£	s.	d.		d.			
4,480	0	0	pence	5½		243	
60	0	0	halfpence	7½			
120	0	0	farthings	9			
1,670	0	0	pence	5½		243	Reduction of the total charge
200	0	0	halfpence	7½			on foreign silver to 11½ dwt.
580	0	0	farthings	9½			per lb. to cause foreign mer- chants to come to the mint as they had been used to do.
4,200	0	0	pence	5½		243	
90	0	0	halfpence	7½			
2,480	0	0	pence	5½		243	
60	0	0	halfpence	7½			
50	0	0	farthings	9½			
5,090	0	0	pence	5½		243	£1020 6s. 8d. clipped money
1,210	0	0	farthings	9½			received without deduction.
5,640	0	0	pence	5½		243	
20	0	0	halfpence	7½			
970	0	0	farthings	9½			
3,560	0	0	pence	5½		243	
280	0	0	halfpence	7½			
770	0	0	farthings	9½			
380	0	0	pence	5½		243	
40	0	0	farthings	9½			
5,410	0	0	pence	5½		243	The £1110 5s. 2d. was derived
110	0	0	halfpence	7½			from the King's mines in
760	0	0	farthings	9½			Devon.
1,110	0	0	pence	5½		243	
180	0	0	halfpence	7½			
720	0	0	farthings	9½			
13,040	0	0	pence	5½		243	Crockards, pollards, &c., called
250	0	0	farthings	9½			in by Ordinance of Stepney (15 May, 1299), but allowed to circulate up to Xmas, 1299, after which date they were only to be received as halfpence. Up to 19 Feb., 1300, the Mint of London purchased them as Foreign silver; after date as English.

SILVER—

Reference.	Date.	Warden.	Bullion purchased.				Total deduction.
P. 33 Edw. I, 44	30 Sept., 1299, to 29 Sept., 1300	John de Sandale	£ 1,250	s. 8	d 2	E.S. E.S. F.S.	$\frac{d}{16}$ 16 $11\frac{1}{2}$ —
			78,399	19	9	E.S.	16
			29,944	13	10	F.S.	$11\frac{1}{2}$
			1,900	0	0		—
"	30 Sept., 1300, to 29 Sept., 1301	"	32,524	16	7	E.S.	16
			3,580	17	8	F.S.	$11\frac{1}{2}$
"	30 Sept., 1301, to 29 Sept., 1302	"	6,360	4	7	E.S.	16
			394	0	9	F.S.	$11\frac{1}{2}$
"	30 Sept., 1302, to 29 Sept., 1303	"	1,629	1	3	E.S.	16
			3,922	10	4	F.S.	$11\frac{1}{2}$
			333	6	8		—
P. 35 Edw. I, 25	30 Sept., 1303, to 29 Sept., 1304	"	936	10	5	E.S.	16
			15,784	17	2	F.S.	$11\frac{1}{2}$
"	30 Sept., 1304, to 30 April, 1305	"	355	4	5	E.S.	16
			22,311	4	5	F.S.	$11\frac{1}{2}$
P. 1 Edw. II, 31	1 May, 1305, to 29 Sept., 1305	John de Everdon	299	1	0	E.S.	16
			45,895	8	11	F.S.	$11\frac{1}{2}$
"	30 Sept., 1305, to 29 Sept., 1306	"	1,463	19	4	E.S.	16
			59,857	8	6	F.S.	$11\frac{1}{2}$
"	30 Sept., 1306, to 19 Sept., 1307	"	1,304	9	2	E.S.	16
			85,018	18	1	F.S.	$11\frac{1}{2}$
P. 2 Edw. II, 45	19 Sept., 1307, to 29 Sept., 1308	Amerigo de' Frisco- baldi	881	5	2	E.S.	16
			67,691	18	0	F.S.	$11\frac{1}{2}$
"	30 Sept., 1308, to 29 Sept., 1309	"	1,156	0	0	E.S.	16
			93,336	1	4	F.S.	$11\frac{1}{2}$

LONDON—*continued*.

Amount issued.				Mint- age.	Seignor- age	Pence in lb.	Remarks
£	s.	d.		d			
106,830	0	0	pence	5½		243	
190	0	0	farthings	9½			
39,990	0	0	pence	5½		243	
370	0	0	halfpence	7½			
1,269	0	0	farthings	9½			
5,450	0	0	pence	5½		243	
1,580	0	0	farthings	9½			
4,520	0	0	pence	5½		243	
60	0	0	halfpence	7½			
1,160	0	0	farthings	9½			
15,540	0	0	pence	5½		243	John Porcher, Master of the Mint, was imprisoned on account of the magnitude of his debt to the king. Boniface, his brother, succeeded him.
50	0	0	halfpence	7½			
1,440	0	0	farthings	9½			
22,104	0	0	pence	5½		243	
30	0	0	halfpence	7½			
1,220	0	0	farthings	9½			
46,897	10	4	pence	5½		243	
90	0	0	farthings	9½			
62,971	5	2	pence	5½		243	
40	0	0	halfpence	7½			
1,150	0	0	farthings	9½			
88,462	17	5	pence	5½		243	
30	0	0	halfpence	7½			
550	0	0	farthings	9½			
69,880	0	0	pence	5½		243	
820	0	0	farthings	9½			
71,504	6	10½	pence	5½		243	
90	0	0	halfpence	7½		245½ to 246	
520	0	0	farthings	9½		244½ to 246½	
25,125	0	0	pence	5½			Indenture of 29 June with John de Pontoise.
380	0	0	farthings	9½			
							The Friscobaldi expelled by the Lords Ordainers. Account never rendered.

Reference.	Date.	Warden.	Bullion purchased.			Total deduction.
P. 9 Edw. II, 44	9 Oct., 1311, to 28 Oct., 1311	John de Cocker- mouth	£ 467	s. 5	d. 6 F.S.	d. 11½
"	23 Oct., 1311, to 29 Sept., 1312	John de Lincoln	762 12,441	7 8	8 E.S. 0 F.S.	16 11½
"	30 Sept., 1312, to 29 Sept., 1313	"	317 6,862	9 13	8 E.S. 2 F.S.	16 11½
"	30 Sept., 1313, to 29 Sept., 1314	"	491 29,487	15 2	8 E.S. 0 F.S.	16 11½
"	30 Sept., 1314, to 25 Feb., 1315	"	207 3,760	18 0	6 E.S. 4 F.S.	16 11½
P. 12 Edw. II, 33	25 Feb., 1315, to 30 Sept., 1315	William Trente	190 7,515	2 6	4 E.S. 7 F.S.	16 11½
"	1 Oct., 1315, to 20 June, 1316	"	226 517	6 9	6 E.S. 6 F.S.	16 11½
"	21 June, 1316, to 28 Sept., 1316	John de Cocker- mouth	143 208	10 12	6 E.S. 6 F.S.	16 11½
"	29 Sept., 1316, to 11 April, 1317	"	101 1,375	4 5	0 E.S. 9 F.S.	16 11½
P. 12 Edw. II, 33 &	11 April, 1317, to 30 Sept., 1317	Augustine le Waleys	117 6,048	16 9	2 E.S. 4 F.S.	16 11½
"	1 Oct., 1317, to 30 Sept., 1318	"	240 12,663	8 13	8 E.S. 10 F.S.	16 11½
"	1 Oct., 1318, to 30 Sept., 1319	"	42 8,688	12 18	4 E.S. 0 F.S.	16 11½
P. 13 Edw. II, 30	1 Oct., 1319, to 13 Aug., 1320	"	35 8,016	18 4	4 E.S. 6 F.S.	16 11½
P. 16 Edw. II, 49	14 Aug., 1320, to 30 Sept., 1320	William de Hau- stede	431	19	0 F.S.	11½

LONDON—*continued.*

Amount issued.				Mint- age.	Seignior- age.	Pence in lb.	Remarks.
£	s.	d.		d.			
468	9	9 $\frac{3}{4}$	pence	5 $\frac{1}{2}$		243	
13,160	0	0	pence	5 $\frac{1}{2}$		243	
397	5	11	farthings	9 $\frac{1}{2}$		244 to 247	
7,032	11	3	pence	5 $\frac{1}{2}$		243	
20	0	0	halfpence	7 $\frac{1}{2}$		243 $\frac{1}{2}$	
290	0	0	farthings	9 $\frac{1}{2}$		244 to 246	
30,245	8	2	pence	5 $\frac{1}{2}$		243	
450	0	0	farthings	9 $\frac{1}{2}$		245 to 245 $\frac{1}{2}$	
3,955	14	2 $\frac{1}{4}$	pence	5 $\frac{1}{2}$		243	
140	0	0	farthings	9 $\frac{1}{2}$		245 to 245 $\frac{1}{2}$	
7,270	18	1 $\frac{1}{2}$	pence	5 $\frac{1}{2}$		243	New Indenture with John Porcher.
40	0	0	halfpence	7 $\frac{1}{2}$		247	
630	0	0	farthings	9 $\frac{1}{2}$		248 to 249	
269	15	5 $\frac{1}{2}$	pence	5 $\frac{1}{2}$		243	
60	0	0	halfpence	7 $\frac{1}{2}$		247	
440	0	0	farthings	9 $\frac{1}{2}$		248 to 249	
173	11	3	pence	5 $\frac{1}{2}$		243	
190	0	0	halfpence	7 $\frac{1}{2}$		247 to 248	
1,100	0	0	pence	5 $\frac{1}{2}$		243	
50	0	0	halfpence	7 $\frac{1}{2}$		242 to 242 $\frac{1}{2}$	
350	0	0	farthings	9 $\frac{1}{2}$		242 to 246	
5,856	7	8	pence	5 $\frac{1}{2}$		243	
30	0	0	halfpence	7 $\frac{1}{2}$		246 to 246 $\frac{1}{2}$	
440	0	0	farthings	9 $\frac{1}{2}$		247 $\frac{1}{2}$ to 250	
13,021	16	4	pence	5 $\frac{1}{2}$		243	
130	0	0	halfpence	7 $\frac{1}{2}$		247	
220	0	0	farthings	9 $\frac{1}{2}$		247 to 249	
8,621	11	9	pence	5 $\frac{1}{2}$		243	
10	0	0	halfpence	7 $\frac{1}{2}$		246	
310	0	0	farthings	9 $\frac{1}{2}$		247 to 248 $\frac{1}{2}$	
8,060	18	4	pence	5 $\frac{1}{2}$		243	
20	0	0	halfpence	7 $\frac{1}{2}$		246	
120	0	0	farthings	9 $\frac{1}{2}$		247 to 248	
409	13	0	pence	5 $\frac{1}{2}$		243	
30	0	0	farthings	9 $\frac{1}{2}$		244 $\frac{1}{2}$ to 245	

SILVER—

Reference.	Date.	Warden.	Bullion purchased.			Total deduction.
			£	s.	d.	
P. 16 Edw. II, 49	1 Oct., 1320, to 30 Sept., 1321	William de Hau- stede	9,384	6	5 F.S.	11½
P. 3 Ed. III, 33 d.	7 Oct., 1322, to 30 Sept., 1323	Robert de Hasel- shaw	91	4	3 E.S.	16
			907	18	8 F.S.	11½
"	1 Oct., 1323, to 30 Sept., 1324	"	6	2	6 E.S.	16
			1,691	16	9 F.S.	11½
	1 Oct., 1324, to 30 Sept., 1325	"	124	9	5 F.S.	11½
P. 3 Edw. III, 32 d.	1 Oct., 1325, to 30 Sept., 1326	"	47	8	6 E.S.	16
			92	5	10	11½
"	1 Oct., 1326, to 4 Feb., 1327	"	112	18	3	11½
P. 3 Edw. III, 33	4 Feb., 1327, to 29 Sept., 1327	Walter Turk	75	18	3 E.S.	16
			48	3	10 F.S.	11½
"	30 Sept., 1327, to 29 Sept., 1328	"	80	0	0 E.S.	16
			52	15	8 F.S.	11½
"	30 Sept., 1328, to 16 Feb., 1329	"	37	2	2 E.S.	16
			46	4	4 F.S.	11½
P. 5 Edw. III, 50	16 Feb., 1329, to 29 Sept., 1329	"	500	9	10 E.S.	16
			133	8	5 F.S.	11½
"	30 Sept., 1329, to 29 Sept., 1330	"	134	0	8 E.S.	16
			342	19	0 F.S.	11½
P. 8 Edw. III, 45	19 Jan., 1331, to 29 Sept., 1331	John de Windsor	306	17	0 E.S.	16
			198	18	7 F.S.	11½
"	30 Sept., 1331, to 29 Sept., 1332	"	367	6	7½ E.S.	16
			45	9	9 F.S.	11½
			40	4	6½	
"	30 Sept., 1332, to 29 Sept., 1333	"	308	11	11 E.S.	16
			340	12	2 F.S.	11½
P. 8 Edw. III, 45	30 Sept., 1333, to 29 Sept., 1334	"	336	1	11 E.S.	16
			48	14	7 F.S.	11½

LONDON—*continued*.

Amount issued.				Mint- age.	Seignior- age.	Pence in lb	Remarks.
£	s.	d.		d.			
9,209	8	9	pence	5½		243	
240	0	0	farthings	9½		244 to 245	
793	14	3	pence	5½		243	
10	0	0	halfpence	7½		243	
220	0	0	farthings	9½		243 to 245	
1,614	19	9	pence	5½		243	
120	0	0	farthings	9½		244 to 245	
10	0	0	halfpence	7½		243	
105	14	6	farthings	9½		244 to 246	
140	0	0	farthings	9½		244½ to 245	Silver "diversi pretii."
60	0	0	pence	5½		243	
50	0	0	farthings	9½		244	
125	9	4	farthings	9½		244½ to 245	
150	0	11	farthings	9½		244 to 245	
85	6	5	farthings	9½		244	
387	0	0	pence	5½		243	First mention of new dies
16	11	0	halfpence	7½		244 to 244½	under Edw. III.
232	17	0	farthings	9½			
60	0	0	pence	5½		243	
5	1	4	halfpence	7½		244 to 244½	
427	3	7½	farthings	9½			Mint closed.
10	5	0	halfpence	7½		244 to 244½	
493	19	9	farthings	9½			
10	5	6	halfpence	7½		244 to 244½	
400	19	4	farthings	9½			This last sum is not charged
							with any deduction.
656	0	9	farthings	9½		244 to 244½	
382	7	9	farthings	9½		244 to 244½	

SILVER—

Reference.	Date.	Warden.	Bullion purchased.			Total deduction.
			£	s	d.	d.
P. 8 Edw. III, 45	29 Sept., 1334, to 7 May, 1335	John de Windsor	229	8	9 E.S.	16
			7	5	5 F.S.	11½
P. 12 Edw. III, 57	8 May, 1335, to 29 Sept., 1335	"	265	4	3 E.S.	26½
			90	12	1 F.S.	20½
"	30 Sept., 1335, to 29 Sept., 1336	"	1,132	1	6 E.S.	26½
			1,721	5	6 F.S.	20½
"	30 Sept., 1336, to 29 Sept., 1337	"	1,619	15	1 E.S.	26½
			28	11	1 F.S.	20½
"	30 Sept., 1337, to 6 June, 1338	"	672	1	11 E.S.	26½
			25	11	5 F.S.	20½
P. 16 Edw. III, 54	6 June, 1338, to 29 Sept., 1338	John de Flete	586	12	6¼ E.S.	26½
			30	18	9 F.S.	20½
"	30 Sept., 1338, to 29 Sept., 1339	"	1,387	11	2¾ E.S.	26½
			22	7	8 F.S.	20½
"	30 Sept., 1339, to 29 Sept., 1340	"	1,445	17	10½ E.S.	26½
			253	19	5½ F.S.	20½
"	30 Sept., 1340, to 29 Sept., 1341	"	887	17	11¾ E.S.	26½
			103	3	3 F.S.	20½
"	30 Sept., 1341, to 29 Sept., 1342	"	675	6	1¼ E.S.	26½
			3,359	8	8 F.S.	20½
P. 17 Edw. III, 50	30 Sept., 1342, to 29 Sept., 1343	"	422	9	8½ E.S.	26½
			12,492	6	6¼ F.S.	20½
P. 18 Edw. III, 43	30 Sept., 1343, to 15 Dec., 1343	"	34	8	11½ E.S.	26½
			2,990	9	10½ F.S.	20½
P. 17 Edw. III, 53	20 Jan., 1344, to 10 July, 1344	Giorgio Chierichino and Lotto Nicolini, of Florence, Masters	20,647	0	4	16
P. 18 Edw. III, 47	10 July, 1344, to 29 Sept., 1344	Percival de Porche, of Lucca, Master Moneyer	12,055	18	5¾	14

LONDON—*continued*.

Amount issued.				Mint- age.	Seignor- age.	Pence in lb.	Remarks.
£	s.	d.		d.			
299	13	2	farthings	9½		244 to 244½	
183	3	10	halfpence	7½		252	Ordinance made at York. Standard to be 10 oz. of silver and 2 oz. of alloy to the pound; and the pound weight to contain 21s. half- pence and 21s. 2d. farthings. Gawain de Suthorp, master moneyer.
200	14	4	farthings	9½		254	
1,316	3	2½	halfpence	7½		252	
1,801	11	5	farthings	9½		254	
376	10	3	halfpence	7½		252	
874	16	4½	farthings	9½		254	
279	18	7	halfpence	7½		252	
464	14	11½	farthings	9½		254	
397	3	2¾	halfpence	7½		252	
272	0	9	farthings	9½		254	
1,301	16	11¾	halfpence	7½		252	
482	2	3½	farthings	9½		254	
1,217	7	2½	halfpence	7½		252	
622	9	3¾	farthings	9½		254	
752	1	11¾	halfpence	7½		252	
322	9	4¾	farthings	9½		254	
4,808	1	2	halfpence	7½		252	
299	11	9½	farthings	9½		254	
13,764	4	6½	halfpence	7½		252	
284	1	5	farthings	9½		254	
3,320	7	11¼	halfpence	7½		252	
19	8	6	farthings	9½		254	
20,919	19	0	pence	9		270	Indenture. Pence to be of old standard and of the weight of those commonly current.
12,257	12	3½	pence	8		266	Indenture with Percival de Porche, of Lucca.

SILVER—

Reference.	Date.	Warden.	Bullion purchased.	Total deduction.
			$\begin{smallmatrix} \text{£} & \text{s} & \text{d} \end{smallmatrix}$	$\begin{smallmatrix} \text{d.} \end{smallmatrix}$
P. 19 Edw. III, 43	30 Sept., 1344, to 23 June, 1345 and 23 June, 1345, to 28 Sept., 1345	William de Wake- field	20,263 11 9	14
			1,790 19 6	14
P. 20 Edw. III, 45	30 Sept., 1345, to 30 July, 1346	"	3,791 3 9 $\frac{1}{4}$ for pence	14
			1,572 14 10 for halfpence	17
			425 12 7 $\frac{1}{4}$ for farthings	19
"	30 July, 1346, to 29 Sept., 1346	"	651 12 9 for pence	14
			189 0 8 $\frac{1}{4}$ for halfpence	17
			144 17 2 $\frac{1}{4}$ for farthings	19
P. 21 Edw. III, 48	30 Sept., 1346, to 23 Nov., 1346	"	437 11 8 for pence	14
			280 2 0 $\frac{1}{4}$ for halfpence	17
			69 18 6 for farthings	19
"	23 Nov., 1346, to 29 Sept., 1347	"	769 6 5 $\frac{1}{4}$ for pence	14
			2,214 3 10 $\frac{1}{4}$ for halfpence	17
			294 7 0 $\frac{1}{4}$ for farthings	19
P. 22 Edw. III, 29	30 Sept., 1347, to 17 May, 1348	Lotto Nicolini and Giorgio Chieri- chino, Masters	1,338 10 10 $\frac{1}{4}$ for pence	14
			2,966 9 9 $\frac{1}{4}$ for halfpence	17
			150 7 3 for farthings	19
P. 22 Edw. III, 32	17 May, 1348, to 29 Sept., 1348	John de Horton	2,747 15 9 $\frac{1}{4}$ for halfpence	17
			64 8 5 for farthings	19
P. 23 Edw. III, 40	30 Sept., 1348, to 27 Jan., 1349	"	1,614 1 9 $\frac{1}{4}$ for halfpence	17
			20 12 9 $\frac{1}{4}$ for farthings	19

LONDON—*continued*.

Amount issued.			Mint- age.	Seignior- age.	Pence in lb.	Remarks.
£	s	d.	d.			
22,336	13	0 $\frac{3}{4}$	pence	8	266	
					268	Fresh Indenture with Percival de Porche.
3,846	11	7 $\frac{1}{4}$	pence	8	268	New Indenture with Percival de Porche. Halfpence and farthings to be of old standard.
1,596	15	2 $\frac{1}{2}$	halfpence	11	279	
431	2	1 $\frac{1}{2}$	farthings	13	281	
662	3	2	pence	6 $\frac{3}{4}$	270	Writ to Giorgio Chierichino and Lotto Nicolini, Masters.
191	8	11 $\frac{1}{4}$	halfpence	10	279	
156	13	5 $\frac{1}{4}$	farthings	12	281	
445	11	5 $\frac{1}{2}$	pence	6 $\frac{3}{4}$	270	The account gives for this and the following account joint totals of money issued, viz. £1231 3s. 11 $\frac{1}{2}$ d. pence, £2502 11s. 2 $\frac{3}{4}$ d. halfpence, £366 8s. 10 $\frac{3}{4}$ d. farthings. The discrepancy in the pence and halfpence is due to a detail in the account.
281	6	5 $\frac{1}{4}$	halfpence	10	279	
70	12	8	farthings	12	281	
785	6	5 $\frac{1}{2}$	pence	6 $\frac{3}{4}$	270	
2,221	7	7 $\frac{1}{2}$	halfpence	10	279 to 280	
295	16	2 $\frac{3}{4}$	farthings	12	281	
1,360	10	10	pence	6 $\frac{3}{4}$	270	
2,991	6	9 $\frac{3}{4}$	halfpence	10	279	
151	3	10 $\frac{3}{4}$	farthings	12	281	
2,752	4	4 $\frac{3}{4}$	halfpence	10	279	
64	11	9 $\frac{1}{2}$	farthings	12	281	
1,616	0	7 $\frac{3}{4}$	halfpence	10	279	The amount of farthings issued is calculated by us.
[20 17 9 $\frac{1}{4}$]			farthings			

Reference.	Date.	Warden.	Bullion purchased.	Total deduction.
P. 23 Edw. III, 40	27 Jan., 1349, to 2 June, 1349	John de Horton	£ s. d. 2,073 7 6 for halfpence 69 2 1 $\frac{1}{4}$ for farthings	dwts. 17 19
"	2 June, 1349, to 12 April, 1350	Robert de Mildenhall	47 7 8 for pence 4,184 12 2 $\frac{1}{4}$ for halfpence 2 19 6 $\frac{1}{4}$ for farthings	14 17 19
P. 24 Edw. III, 39	12 April, 1350, to 29 Sept., 1350	"	4,125 18 10 $\frac{1}{2}$ for halfpence 3 1 3 for farthings	17 19
P. 24 Edw. III, 42	29 Sept., 1350, to 24 Jan., 1351	"	2,446 14 8 $\frac{1}{2}$ for halfpence	17
P. 24 Edw. III, 45	24 Jan., 1351, to 24 June, 1351	"	4,290 19 8 for halfpence 26 1 3 for farthings	17 19
P. 25 Edw. III, 45	24 June, 1351, to 25 Oct., 1351	"	13,891 14 0	14
P. 25 Edw. III, 39	25 Oct., 1351, to 4 March, 1352	"	22,334 10 9	14
P. 25 Edw. III, 43	4 March, 1352, to 24 June, 1352	"	20,543 14 10	14
P. 26 Edw. III, 37	24 June, 1352, to 11 Nov., 1352	"	27,438 16 5	14
P. 27 Edw. III, 35	11 Nov., 1352, to 6 May, 1353	"	35,989 7 7	14
P. 27 Edw. III, 39	7 May, 1353, to 24 Dec., 1353	William de Rothwell	53,861 12 7 $\frac{1}{2}$	14
P. 28 Edw. III, 33	24 Dec., 1353, to 29 Sept., 1354	"	37,389 1 11 $\frac{1}{2}$	14

LONDON—continued.

Amount issued.			Mint- age.	Seignor- age.	Pence in lb.	Remarks.
£	s.	d.	d.	d.		
2,075	16	11½	8½		279	Indenture with John Donati di Castello of Florence and others, master moneyers.
69	2	1¾	10½		281	
From this point the figures in this column are the same as those in the fourth column.			5½		270	
pence			8½		279	
halfpence			10½		281	
farthings			8½		279	
halfpence			10½		281	
farthings			8½		279	
halfpence			8½		279	
farthings			10½		281	
			8	7	300	Writ to master moneyer dated 1 July, 1351. The pieces coined to be 4d., 2d., and 1d., of old standard. The accounts give no means of discovering how many of each were coined.
			8	7	300	
			8	7	300	
			8	7	300	Indenture with Henry de Bru-selee and John de Cicestre.
			8	7	300	
			8	7	300	

SILVER—

Reference.	Date.	Warden.	Bullion purchased.			Total deduction
			£	s.	d.	d
P. 29 Edw. III, 37	29 Sept., 1354, to 5 April, 1355	William de Rothwell	14,021	7	4½	14
P. 29 Edw. III, 38	5 April, 1355, to 31 May, 1355	„	4,862	9	3½	14
P. 29 Edw. III, 39	31 May, 1355, to 24 Dec., 1355	„	19,750	19	2¾	9½
P. 30 Edw. III, 45	24 Dec., 1355, to 6 Nov., 1356	„	22,664	4	6¾	9½
P. 30 Edw. III, 39	6 Nov., 1356, to 8 April, 1357	„	6,041	17	11¼	9½
P. 31 Edw. III, 37	8 April, 1357, to 29 Sept., 1357	„	8,468	9	10¼	9½
P. 32 Edw. III, 39	30 Sept., 1357, to 1 April, 1358	„	3,591	4	7½	9½
P. 32 Edw. III, 41	1 April, 1358, to 29 Sept., 1358	„	6,260	9	4½	9½
P. 32 Edw. III, 35	30 Sept., 1358, to 21 April, 1359	„	2,299	18	5½	9½
P. 33 Edw. III, 41	21 April, 1359, to 29 Sept., 1359	„	6,038	3	9¼	9½
P. 33 Edw. III, 35	29 Sept., 1359, to 5 April, 1360	„	1,880	5	5¾	9½
P. 33 Edw. III, 42	5 April, 1360, to 17 June, 1360	„	1,672	16	1	9½
Exch. K. R. Misc. Ble. 291, No. 20	17 June, 1360, to 29 Sept., 1360	John de Thorpe	1,361	13	1	9½
<i>Ibid.</i> , No. 24	30 Sept., 1360, to 5 March, 1361	„	902	6	4½	9½
P. 35 Edw. III, 51	5 March, 1361, to 18 June, 1361	„	1,265	10	9½	8
P. 35 Edw. III, 50	18 June, 1361, to 29 Sept., 1361	„	2,647	19	1½	8
P. 35 Edw. III, 55	30 Sept., 1361, to 22 March, 1362	„	4,918	10	8½	8

LONDON—*continued*

Amount issued.	Mint- age.	Seignor- age.	Pence in lb.	Remarks.
	<i>d.</i> 8	<i>d.</i> 7	300	
	8	7	300	
	$6\frac{2}{16}$		300	Indenture with Henry de Bruselee.
	$6\frac{2}{16}$		300	
	$6\frac{2}{16}$		300	
	$6\frac{2}{16}$		300	
	$6\frac{2}{16}$		300	
	$6\frac{2}{16}$		300	
	$6\frac{2}{16}$		300	
	$6\frac{2}{16}$		300	
	$6\frac{2}{16}$		300	
	$6\frac{2}{16}$		300	
	$6\frac{2}{16}$		300	
	$6\frac{2}{16}$		300	
	$6\frac{2}{16}$		300	
	$6\frac{2}{16}$		300	
	7		300	Indenture with Walter, son of Philip de' Bardi.
	7		300	
	7		300	

Reference.	Date.	Warden.	Bullion purchased.			Total deduction.
			£	s.	d.	d.
P. 36 Edw. III, 43	22 March, 1362, to 29 Sept., 1362	John de Thorpe	6,412	11	1	8
P. 36 Edw. III, 47	30 Sept., 1362, to 11 Feb., 1363	"	755	13	4	8
P. 37 Edw. III, 42	11 Feb., 1363, to 29 Sept., 1363	"	1,762	13	0	8
P. 38 Edw. III, 45	30 Sept., 1363, to 29 Sept., 1364	"	2,271	14	1	8
P. 39 Edw. III, 40	30 Sept., 1364, to 29 Sept., 1365	"	1,187	19	3	8
P. 40 Edw. III, 48	30 Sept., 1365, to 29 Sept., 1366	"	nil			
P. 41 Edw. III, 39	30 Sept., 1366, to 29 Sept., 1367	"	nil			
F. 42 Edw. III, A.	30 Sept., 1367, to 29 Sept., 1368	"	1,754	10	9	8
F. 43 Edw. III, H.	30 Sept., 1368, to 29 Sept., 1369	"	1,227	13	0	8
F. 44 Edw. III, B.	30 Sept., 1369, to 29 Sept., 1370	"	1,556	5	5	8
F. 45 Edw. III, G.	30 Sept., 1370, to 29 Sept., 1371	"	640	13	3	8
F. 46 Edw. III, A.	30 Sept., 1371, to 29 Sept., 1372	"	139	1	9	8
F. 47 Edw. III, D.	30 Sept., 1372, to 29 Sept., 1373	"	362	14	2	8
F. 48 Edw. III, C.	30 Sept., 1373, to 29 Sept., 1374	"	372	13	0	8
F. 49 Edw. III, A.	30 Sept., 1374, to 24 Sept., 1375	"	3,334	13	9	8
F. 50 Edw. III, B.	24 Sept., 1375, to 24 July, 1376	Richard Lyons	2,331	14	5	8
F. 51 Edw. III, A.	24 July, 1376, to 20 Sept., 1377	Thomas Hervey	180	0	0	8

TABLE II.—CANTERBURY

SILVER—

Reference	Date.	Warden.	Bullion purchased.			Total deduction.
			£	s	d	d.
P. 2 Edw. I, 18	25 Dec., 1272, to 24 June, 1274	Bartholemew de Castello	1,065	7	6	—
P. 7 Edw. I, 21	23 April, 1278, to 7 July, 1278, and 7 July, 1278, to 20 Nov., 1278	„	352	5	6	—
			451	2	3	—
P. 15 Edw. I, 3	1 Jan., 1280, to 18 Oct., 1280	Gregory de Rokesle and Orlandino di Poggio	27,040	9	0 E.S.	19
			8,167	3	11 F.S.	17½
„	18 Oct., 1280, to 12 Mar., 1281, and 12 March, 1281, to 3 May, 1281	„	1,422	0	0 E.S.	19
			813	3	6 F.S.	17½
		„	1,452	17	0 E.S.	16
			1,678	10	1 F.S.	14½
„	3 May, 1281, to 29 Sept., 1281	Gregory de Rokesle	1,437	0	0 E.S.	—
			15,886	0	6 F.S.	—
„	30 Sept., 1281, to 25 Nov., 1282	„	1,688	12	0 E.S.	—
			23,400	3	8 F.S.	—
„	25 Nov., 1282, to 25 Nov., 1283	„	788	0	0 E.S.	—
			14,468	5	5 F.S.	—
„	25 Nov., 1283, to 20 May, 1285	„	977	16	9 E.S.	—
			22,523	14	10 F.S.	—
P. 14 Edw. I, 4	20 May, 1285, to 15 Aug., 1286	„	1,451	11	3 E.S.	16
			27,176	10	1 F.S.	14½
„	15 Aug., 1286, to 15 June, 1287	„	873	12	6 E.S.	16
			29,699	17	0 F.S.	14½
P. 16 Edw. I, 29	15 June, 1287, to 3 Nov., 1287	„	541	19	1 E.S.	16
			13,498	9	2 F.S.	14½
P. 16 Edw. I, 28	3 Nov., 1287, to 3 Nov., 1288	„	331	13	4 E.S.	16
			14,510	1	9 F.S.	14½

AND PROVINCIAL MINTS.

CANTERBURY.

Amount issued.			Mint- age.	Seignor- age.	Pence in lb.	Remarks.
£	s	d.	d.	d.		
		—	—	6	242	Of the seignorage the king has $\frac{2}{3}$ ths and the archbishop $\frac{1}{3}$ ths.
		—	—	6	242	
		—	—			
27,032	16	1 pence	7	—	242	
8,167	3	11 pence	$5\frac{1}{2}$			
{	2,668	3 0 pence	$6\frac{1}{2}$	—	242 $\frac{1}{2}$	
	2,572	17 0 pence	$5\frac{1}{2}$			
	927	7 8 pence	—	$9\frac{1}{2}$	243	
	16,472	12 4 pence	—	9		
	—		—	$9\frac{1}{2}$	243	
	—		—	9		
	—		—	$9\frac{1}{2}$	243	
	—		—	9		
	—		—	10	243	See note to London account.
	—		—	9		
	298	15 1 E.S. pence	6		243	
	1,152	16 2 F.S. pence	$5\frac{1}{2}$			
	27,176	10 1 F.S. pence	$5\frac{1}{2}$			
	873	0 9 alloy	$5\frac{1}{2}$			
	28,690	0 0 pence	$5\frac{1}{2}$		243	
	17,150	0 0 pence	$5\frac{1}{2}$		243	
	15,070	0 0 pence	$5\frac{1}{4}$		243	

SILVER—

Reference.	Date	Warden	Bullion purchased.			Total deduction.
P. 18 Edw. I, 1	3 Nov., 1288, to 15 July, 1290	Gregory de Rokesle	£ 401	s. 6	d. 11	E.S. 16
			5,956	11	4	F.S. 14½
P. 19 Edw. I, 55	15 July, 1290, to 15 July, 1291	"	209	5	0½	E.S. 16
			744	19	2	F.S. 14½
P. 27 Edw. I, 23	15 July, 1291, to 29 Sept., 1292	William de Wymondham	272	14	4	E.S. 16
			530	11	9	F.S. 11½
"	30 Sept., 1292, to 29 Sept., 1293	"	226	17	1	E.S. 16
			525	14	8	F.S. 11½
"	30 Sept., 1293, to 29 Sept., 1294	"	69	0	5	E.S. 16
			98	17	0	F.S. 11½
"	30 Sept., 1294, to 29 Sept., 1296	"	16	5	4	E.S. 16
			19	18	9	E.S. 16
P. 33 Edw. I, 44	1 Nov., 1299, to 29 Sept., 1300	John de Sandale	354	14	7	E.S. 16
			17,783	5	8	E.S. 16
			5,366	13	9	F.S. 11½
"	30 Sept., 1300, to 29 Sept., 1301	"	9,004	7	6	E.S. 16
			1,529	16	0	F.S. 11½
"	30 Sept., 1301, to 29 Sept., 1302	"	2,642	9	9	E.S. 16
			57	12	8	F.S. 11½
"	30 Sept., 1302, to 29 Sept., 1303	"	1,511	1	10	E.S. 16
			1,918	2	10	F.S. 11½
P. 35 Edw. I, 25	30 Sept., 1303, to 29 Sept., 1304	"	408	16	3	E.S. 16
			14,596	12	6	F.S. 11½
"	30 Sept., 1304, to 30 April, 1305	"	84	11	2	E.S. 16
			14,181	15	5	F.S. 11½
P. 1 Edw. II, 31	1 May, 1305, to 29 Sept., 1305	John de Everdon	20,414	6	9	F.S. 11½

TABLES OF BULLION COINED UNDER EDWARD I, II, AND III. 229

CANTERBURY—*continued.*

Amount issued.	Mint- age.	Seignior- age	Pence in lb	Remarks.
£ 5,400 0 0 pence	$5\frac{1}{2}$		243	
910 0 0 pence	$5\frac{1}{2}$		243	
770 0 0 pence	$5\frac{1}{2}$		243	
740 0 0 pence	$5\frac{1}{2}$		243	
90 0 0 pence	$5\frac{1}{2}$		243	
				Mint closed.
22,340 0 0 pence	$5\frac{1}{2}$		243	By order dated 14 March, 1300, all pieces of money not being any foreign currency to be bought at the rate for English silver. At this date, therefore, crockards and pollards were transferred from the category of foreign to that of English silver. The two sums given show amounts bought as English silver before and after 10 March, 1300.
22,250 0 0 pence	$5\frac{1}{2}$		243	
3,070 0 0 pence	$5\frac{1}{2}$		243	
3,780 0 0 pence	$5\frac{1}{2}$		243	
15,310 0 0 pence	$5\frac{1}{2}$		243	
14,557 19 2 pence	$5\frac{1}{2}$		243	
21,012 15 7 pence	$5\frac{1}{2}$		243	

SILVER—

Reference.	Date.	Warden.	Bullion purchased.			Total deduction
			£	s.	d.	
P. 1 Edw. II. 31	30 Sept., 1305, to 29 Sept., 1306	John de Everdon	23	12	6 E.S.	16
			31,399	13	3 F.S.	11½
"	30 Sept., 1306, to 18 Sept., 1307	"	52,503	3	7 F.S.	11½
P. 2 Edw. II. 45	19 Sept., 1307, to 29 Sept., 1308	Amerigo de' Frisco- baldi	44,290	17	1 F.S.	11½
"	30 Sept., 1308, to 29 Sept., 1309	"	41,793	17	2 F.S.	11½
P. 9 Edw. II. 44	23 Oct., 1311, to 29 Sept., 1312	John de Lincoln	4,770	7	10 F.S.	11½
"	30 Sept., 1312, to 11 May, 1313	"	2,562	12	10 F.S.	11½
"	12 May, 1313, to 29 Sept., 1313	"	4,198	9	3 F.S.	11½
P. 9 Edw. II. 44	30 Sept., 1313, to 26 Feb., 1314	"				
"	27 Feb., 1314, to 29 Sept., 1314	"	34,648	5	2 F.S.	11½
"	30 Sept., 1314, to 24 Feb., 1315	"	12,956	0	3 F.S.	11½
P. 12 Edw. II. 33	25 Feb., 1315, to 30 Sept., 1315	William Trente	15	12	4 E.S.	16
			7,147	16	10 F.S.	11½
"	1 Oct., 1315, to 20 June, 1316	"	897	8	4 F.S.	11½
"	21 June, 1316, to 28 Sept., 1316	John de Cocker- mouth	1,612	1	10 F.S.	11½
"	29 Sept., 1316, to 11 April, 1317	"	3,940	7	6 F.S.	11½
"	11 April, 1317, to 30 Sept., 1317	Augustine le Waleys	10,560	0	0 F.S.	11½
"	1 Oct., 1317, to 30 Sept., 1318	"	20,820	6	9 F.S.	11½

TABLES OF BULLION COINED UNDER EDWARD I, II, AND III. 231

CANTERBURY—*continued*.

Amount issued.				Mint- age.	Seignior- age.	Pence in lb.	Remarks.
£	s.	d.		d.			
32,427	7	3	pence	5½		243	
54,219	4	9¾	pence	5½		243	
45,877	10	10½	pence	5½		243	
35,077	0	5½	pence	5½		243	Mintage reduced by agreement with John de Pontoise, 29 June, 1309. No Accounts.
8,054	11	1¼	pence	5¼		243	
4,898	6	4¾	pence	5½		243	
2,634	13	10¾	pence	5½		243	
4,300	7	5½	pence	5½		243	
							No work done.
35,663	8	1¾	pence	5½	—	243	
13,322	2	10¾	pence	5½		243	
7,396	15	0¼	pence	5½		243	Pence stated to be coined from the foreign silver.
916	4	1	pence	5½		243	
1,661	14	5½	pence	5½		243	
4,060	7	1	pence	5½		243	
10,834	16	10½	pence	5½		243	
21,482	2	3	pence	5½		243	

SILVER—

Reference.	Date.	Warden.	Bullion purchased.			Total deduction
			£	s.	d.	d.
P. 12 Edw. II, 33	1 Oct., 1318, to 30 Sept., 1319	Augustine le Waleys	16,212	3	0 F.S.	11½
P. 13 Edw. II, 30	1 Oct., 1319, to 13 Aug., 1320	"	13,010	0	9 F.S.	11½
P. 16 Edw. II, 49	14 Aug., 1320, to 30 Sept., 1320	William de Hau- stede	2,562	6	8 F.S.	11½
"	1 Oct., 1320, to 30 Sept., 1321	"	5,514	0	9 F.S.	11½
P. 3 Edw. III, 33 d.	7 Oct., 1322, to 30 Sept., 1323	Robert de Hasel- shaw	1,060	17	11 F.S.	11½
P. 3 Edw. III, 33	30 Sept., 1323, to 16 Feb., 1329	Walter Turk	46	0	0 F.S.	11½
P. 5 Edw. III, 50	16 Feb., 1329, to 29 Sept., 1329	"	92	4	6 F.S.	11½
P. 8 Edw. III, 45	19 Jan., 1331, to 29 Sept., 1331	John de Windsor	613	10	0 F.S.	11½
"	30 Sept., 1331, to 29 Sept., 1332	"				
P. 19 Edw. III, 43	30 Sept., 1344, to 23 June, 1345	William de Wake- field	1,638	16	9	14
"	24 June, 1345, to 29 Sept., 1345	"	52	15	4	14
P. 21 Edw. III, 48	30 July, 1346, to 29 Sept., 1346	"	212	14	6½	14
"	2 Oct., 1346, to 19 Dec., 1346	"	94	1	11	14

SILVER—PRO

BRIS

P. 33 Edw. I, 44.	8 May, 1300, to 31 Oct., 1300	John de Sandale	12,345	13	0 E.S.	16
			483	10	6 F.S.	11½

CHES

P. 33 Edw. I, 44	12 July, 1300, to 16 Nov., 1300	"	1,405	10	5 E.S.	16
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CANTERBURY—*continued.*

Amount issued.	Mint- age.	Seignior- age	Pence in lb.	Remarks.
£ 17,662 s 5 d. 6 pence	$5\frac{1}{2}$		243	
13,272 3 $2\frac{3}{4}$ pence	$5\frac{1}{2}$		243	
2,589 15 $1\frac{3}{4}$ pence	$5\frac{1}{2}$		243	
5,548 11 $2\frac{3}{4}$ pence	$5\frac{1}{2}$		243	
1,076 19 $2\frac{3}{4}$ pence	$5\frac{1}{2}$		243	
48 4 1 pence	$5\frac{1}{2}$		243	Mint closed.
94 14 $5\frac{1}{2}$ pence	$5\frac{1}{2}$		243	
630 0 0 pence	$5\frac{1}{2}$		243	Mint not working.
				No work.
1,716 17 1 pence	8		266	Mint closed. Indenture with Percival de Porche.
	8		263	New indenture with the same, 23 June.
212 14 $6\frac{1}{2}$ pence	$6\frac{3}{4}$		270	
94 1 11 pence	$6\frac{3}{4}$		270	Mint finally closed.

VINCIAL MINTS.

TOL.

13,410 0 0 pence	$5\frac{1}{2}$		243	
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TER.

1,450 0 0 pence	$5\frac{1}{2}$		243	
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SILVER—PROVINCIAL

EXE

Reference.	Date.	Warden.	Bullion purchased.	Total deduction.
			£ s. d.	d.
P. 33 Edw. I, 44	12 June, 1300, to 31 Dec., 1300	John de Sandale	3,757 0 0 E.S.	16

NEWCASTLE-

"	1 June, 1300, to 29 Sept., 1300	"	5,368 12 2 E.S.	16
"	30 Sept., 1300, to 29 Sept., 1301	"	11,877 17 5 E.S.	16
"	30 Sept., 1301, to 29 Sept., 1302	"	2,930 8 8 E.S.	16

YORK AND

"	27 April, 1300, to 31 Dec., 1300	"	11,710 9 5 E.S. 5,574 9 9 F.S.	16 11½
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YO

P. 28 Edw. III, 33	14 July, 1353, to 24 Dec., 1354	William Hunte	18,761 6 9½	14
P. 29 Edw. III, 40	25 Dec., 1354, to 29 May, 1355	"	1,892 5 9	14

CAL

P. 37 Edw. III, 51	20 Feb., 1363, to 10 April, 1364	Thomas de Brantingham, Treasurer of Calais	[2,678 0 0]	[8]
P. 39 Edw. III, 38	10 April, 1364, to 13 April, 1365	"	389 11 1	8

TABLES OF BULLION COINED UNDER EDWARD I, II, AND III. 235

MINTS—*continued*.

TER.

Amount issued.			Mint- age.	Seignor- age.	Pence in lb.	Remarks.
£	s.	d.	d.			
3,870	0	0 pence	5½		243	

ON-TYNE.

5,210	0	0 pence	5½		243	
12,510	0	0 pence	5½		243	
2,970	0	0 pence	5½		243	

HULL.

17,770	0	0 pence	5½		243	
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RK.

18,761	6	9¼ pence	8		300	
1,892	5	9 pence	8		300	Payment made for carriage of dies from London.

AIS.

			[7]		[300]	Amount calculated from issues.
389	11	1 pence	7		300	

TABLE III.—GOLD—

LON

Reference.	Date.	Warden.	Pure gold coined.			Total deduction.
			lbs.	s	dwt.	
P. 17 Edw. III, 53	20 Jan., 1344, to 10 July, 1344	Giorgio Chierichino, Lotto Nicolini of Florence	2,129	18	8 $\frac{1}{4}$	23/6
P. 18 Edw. III, 47	10 July, 1344, to 29 Sept., 1344	Percival de Porche of Lucca, Master Moneyer	560	7	5 $\frac{1}{4}$	8/4
P. 19 Edw. III, 43	30 Sept., 1344, to 23 June, 1345	William de Wake- field	669	11	4	8/4
„	23 June, 1345, to 29 Sept., 1345	„	87	13	3	7/-
P. 20 Edw. III, 45	30 Sept., 1345, to 30 July, 1346	„	350	3	9 $\frac{1}{4}$	7/-
„	30 July, 1346, to 29 Sept., 1346	„	265	5	5	11/8
P. 21 Edw. III, 48	30 Sept., 1346, to 23 Nov., 1346	„	585	10	0 $\frac{1}{2}$	11/8
„	23 Nov., 1346, to 29 Sept., 1347	„	2,028	5	2 $\frac{1}{4}$	11/8
P. 22 Edw. III, 29	30 Sept., 1347, to 17 May, 1348	Lotto Nicolini Giorgio Chierichino	1,795	13	2 $\frac{3}{4}$	11/8
P. 22 Edw. III, 32	17 May, 1348, to 29 Sept., 1348	John de Horton	1,297	3	2 $\frac{3}{4}$	11/8
P. 23 Edw. III, 40	30 Sept., 1348, to 27 Jan., 1349	„	243	1	9 $\frac{1}{2}$	11/8
„	27 Jan., 1349, to 2 June, 1349	„	549	16	11	11/8

LONDON AND CALAIS.

DON.

Mintage.	Seignor- age.	Pence in florin.	Florins in lb.	Remarks.
3/6	20/-	72 36 18	50 100 200	
3/4	5/-	80 40 20	39½ 79 158	Convention with Percival de Porche of Lucca, Orig. 18 Edw. III.
3/4	5/-	do.	39½ 79 158	
2/-	5/-	do.	39½ 79 158	Indenture of 23 June.
2/-	5/-	do.	39½ 79 158	Indenture with Percival de Porche of Lucca.
1/8	10/-	do.	42 84 168	Writ of 23 July, 20 Edw. III.
1/8	10/-	do.	do.	
1/8	10/-	do.	do.	
1/8	10/-	do.	do.	
1/8	10/-	do.	do.	
1/8	10/-	do.	do.	
1/2	10/6	do.	do.	Indenture between King and John Donati de Castello of Florence, Philip John de Neri of Florence, and Benedict Isbare of Lucca, Masters of the Mint.

Reference	Date.	Warden.	Pure gold coined.		Total deduction.
			lbs.	s. dwt.	
P. 23 Edw. III, 40	2 June, 1349, to 12 April, 1350	Robert de Mildenhall	2,046	1 8	11/8
P. 24 Edw. III, 39	12 April, 1350, to 29 Sept., 1350	„	546	13 6	11/8
P. 24 Edw. III, 42	29 Sept., 1350, to 24 Jan., 1351	„	49	12 6	11/8
P. 24 Edw. III, 45	24 Jan., 1351, to 24 June, 1351	„	56	15 6½	11/8
P. 25 Edw. III, 45	24 June, 1351, to 25 Oct., 1351	„	6,272	9 8½	9/3
P. 25 Edw. III, 39	25 Oct., 1351, to 4 March, 1352	„	1,655	14 3¼	9/3
P. 25 Edw. III, 43	4 March, 1352, to 24 June, 1352	„	1,704	9 1¾	9/3
P. 26 Edw. III, 37	24 June, 1352, to 11 Nov., 1352	„	1,480	8 2	9/3
P. 27 Edw. III, 35	11 Nov., 1352, to 6 May, 1353	„	407	15 3	9/3
P. 27 Edw. III, 39	7 May, 1353, to 24 Dec., 1353	William de Rothewell	3,181	13 8	9/3
P. 28 Edw. III, 33	24 Dec., 1353, to 29 Sept., 1354	„	8,800	11 1½	9/3
P. 29 Edw. III, 37	30 Sept., 1354, to 5 April, 1355	„	2,436	9 3	9/3
P. 29 Edw. III, 38	5 April, 1355, to 31 May, 1355	„	1,036	7 8¾	9/3
P. 29 Edw. III, 39	31 May, 1355, to 24 Dec., 1355	„	2,177	3 5¼	6/8
P. 30 Edw. III, 45	24 Dec., 1355, to 6 Nov., 1356	„	551	17 11	6/8
P. 30 Edw. III, 39	6 Nov., 1356, to 8 April, 1357	„	289	4 8	6/8

LONDON—*continued.*

Mintage.	Seignior- age.	Pence in florin.	Florins in lb.	Remarks.
1/2	10/6	80 40 20	42 84 168	
1/2	10/6	do.	do.	
1/2	10/6	do.	do.	
1/2	10/6	do.	do.	
2/-	7/3	do.	45 90 180	Writ 1 July, 1351. Orig. 25 Edw. III. Agreement between King and Henry de Bruselee and John de Cicestre.
2/-	7/3	do.	do.	
2/-	7/3	do.	do.	
2/-	7/3	do.	do.	
2/-	7/3	do.	do.	
2/-	7/3	do.	do.	
2/-	7/3	do.	do.	
2/-	7/3	do.	do.	
2/-	7/3	do.	do.	
1/2	5/6	do.	do.	K.R. Mem. 30 Edw. III, Mich. Recorda gives indenture.
1/2	5/6	do.	do.	
1/2	5/6	do.	do.	

Reference.	Date.	Warden.	Pure gold coined			Total deduction.
			lbs.	s.	dwt	
P. 31 Edw. III, 37	8 April, 1357, to 29 Sept., 1357	William de Rothewell	4,910	6	8½	6/8
P. 32 Edw. III, 39	29 Sept., 1357, to 1 April, 1358	„	3,169	13	9½	6/8
P. 32 Edw. III, 41	1 April, 1358, to 29 Sept., 1358	„	4,308	2	7½	6/8
P. 32 Edw. III, 35	29 Sept., 1358, to 21 April, 1359	„	2,248	11	2½	6/8
P. 33 Edw. III, 41	21 April, 1359, to 29 Sept., 1359	„	4,234	0	2¾	6/8
P. 33 Edw. III, 35	30 Sept., 1359, to 5 April, 1360	„	2,029	13	9½	6/8
P. 33 Edw. III, 42	5 April, 1360, to 17 June, 1360	„	2,164	5	0¼	6/8
Acct., &c., Exch. K.R. Ble. 291, No. 24	29 Sept., 1360, to 5 March, 1361	John de Thorpe	3,222	14	6½	6/8
P. 35 Edw. III, 51	6 March, 1361, to 18 June, 1361	„	5,960	3	3	5/-
P. 35 Edw. III, 50	18 June, 1361, to 29 Sept., 1361	„	4,675	1	2½	5/-
P. 35 Edw. III, 55	30 Sept., 1361, to 22 March, 1362	„	4,339	1	3½	5/-
P. 36 Edw. III, 43	22 March, 1362, to 29 Sept., 1362	„	4,403	13	6¾	5/-
P. 36 Edw. III, 47	30 Sept., 1362, to 11 Feb., 1363	„	736	1	3½	5/-
P. 37 Edw. III, 42	11 Feb., 1363, to 29 Sept., 1363	„	1,780	6	9¾	5/-
P. 38 Edw. III, 45	30 Sept., 1363, to 29 Sept., 1364	„	1,365	16	9¼	5/-
P. 39 Edw. III, 40	30 Sept., 1364, to 29 Sept., 1365	„	1,043	15	8¾	5/-

LONDON—continued.

Mintage	Seignior- age.	Pence in florin.	Florins in lb.	Remarks.
1/2	5/6	80 40 20	45 90 180	
1/2	5/6	do.	do.	
1/2	5/6	do.	do.	
1/2	5/6	do.	do.	
1/2	5/6	do.	do.	
1/2	5/6	do.	do.	
1/2	5/6	do.	do.	
1/2	5/6	do.	do.	Foreign accounts missing from Pipe Roll 34 Edw. III.
1/8	3/4	do.	do.	Indenture with Walter, son of Philip de' Bardi.
1/6	3/6	do.	do.	Convention with Robert de Portico, master.
1/6	3/6	do.	do.	
1/6	3/6	do.	do.	
1/6	3/6	do.	do.	
1/6	3/6	do.	do.	
1/6	3/6	do.	do.	

GOLD—

Reference.	Date.	Warden.	Pure gold coined.			Total deduction.
P. 40 Edw. III, 48	30 Sept., 1365, to 29 Sept., 1366	John de Thorpe	lbs	s.	dwt	5/-
			1,101	5	7½	
P. 41 Edw. III, 39	30 Sept., 1366, to 29 Sept., 1367	"	741	0	11½	5/-
F. 42 Edw. III, A.	30 Sept., 1367, to 29 Sept., 1368	"	1,680	4	1	5/-
F. 43 Edw. III, H.	30 Sept., 1368, to 29 Sept., 1369	"	4,847	13	9¾	5/-
F. 44 Edw. III, B.	30 Sept., 1369, to 29 Sept., 1370	"	1,480	7	0	5/-
F. 45 Edw. III, G.	30 Sept., 1370, to 29 Sept., 1371	"	1,029	15	0½	5/-
F. 46 Edw. III, A.	30 Sept., 1371, to 29 Sept., 1372	"	1,455	1	6	5/-
F. 47 Edw. III, D.	30 Sept., 1372, to 29 Sept., 1373	"	973	2	3½	5/-
F. 48 Edw. III, C.	30 Sept., 1373, to 29 Sept., 1374	"	642	16	0	5/-
F. 49 Edw. III, A.	30 Sept., 1374, to 24 Sept., 1375	"	694	5	4¾	5/-
F. 50 Edw. III, B.	24 Sept., 1375, to 24 July, 1376	Richard Lyons	376	6	6	5/-
F. 51 Edw. III, A.	24 July, 1376, to 20 Sept., 1377	Thomas Hervey	273	8	2¼	5/-
CAL						
P. 37 Edw. III, 51	20 Feb., 1363, to 10 April, 1364	Thomas de Brantingham	3,528	13	4	5/-
P. 39 Edw. III, 38	10 April, 1364, to 13 April, 1365	"	683	3	3¾	5/-
F. 42 Edw. III, C.	13 April, 1365, to 13 April, 1366	"	6,387	1	11½	5/-

LONDON—*continued.*

Mintage.	Seignior- age	Pence in florin.	Florins in lb.	Remarks.
1/6	3/6	80 40 20	45 90 180	
1/6	3/6	do.	do.	
1/6	3/6	do.	do.	
1/6	3/6	do.	do.	
1/6	3/6	do.	do.	
1/6	3/6	do.	do.	
1/6	3/6	do.	do.	
1/6	3/6	do.	do.	
1/6	3/6	do.	do.	
1/6	3/6	do.	do.	
1/6	3/6	do.	do.	
1/6	3/6	do.	do.	

AIS.

1/6	3/6	do.	do.	Amount calculated from issues. Account rendered "deducto monetagio."
1/6	3/6	do.	do.	
1/6	3/6	do.	do.	

GOLD—

Reference.	Date.	Warden.	Pure gold coined.			Total deduction
			lbs.	s.	dwt.	
F. 42 Edw. III, C.	13 April, 1366, to 20 March, 1368	Thomas de Brant- ingham	7,597	6	7½	5/-
F. 46 Edw. III, D.	20 March, 1368, to 27 Aug., 1368	William de Gun- thorp	606	13	6½	5/-
	27 Aug., 1368, to 26 Oct., 1370		3,461	10	5¾	5/-
	26 Oct., 1370, to 16 Oct., 1371		1,080	17	3½	5/-
F. 47 Edw. III, E.	16 Oct., 1371, to 4 Nov., 1373	„	4,672	7	9	5/-
F. 48 Edw. III, F.	4 Nov., 1373, to 16 June, 1374	John de Romeseye	608	10	11	5/-
	16 June, 1374, to 4 Nov., 1374		123	12	7½	5/-
F. 50 Edw. III, D.	4 Nov., 1374, to 14 July, 1375	„	110	4	7½	5/-
	14 July, 1375, to 4 Nov., 1375		97	19	0	5/-
F. 8 Ric. II, C.	4 Nov., 1375, to 15 May, 1381	William Eyrmyrn, Treasurer of Calais	1,984	11	11	5/-
„	15 May, 1381, to 7 Jan., 1384	„	5	19	10	5/-

CALAIS—*continued*.

Mintage.	Seignior- age.	Pence in florin	Florins in lb.	Remarks
1/6	3/6	80 40 20	45 90 180	
1/-	4/-	do.	do.	Bardettus de Malepilis, campsor.
1/-	4/-	do.	do.	
1/-	4/-	do.	do.	
1/-	4/-	do.	do.	
1/-	4/-	do.	do.	John de Leycester, campsor.
1/-	4/-	do.	do.	
1 -	4/-	do.	do.	
1/-	4/-	do.	do.	
1/-	4/-	do.	do.	
1/6	3/6	do.	do.	

IX.

MEDALLIONS TRUE AND FALSE OF MARY QUEEN OF SCOTS AND CHARLES I.

(See Plates X., XI.)

IN these days, when the increasing number of collectors has resulted in the issue to the public of a large quantity of spurious medals, misleading at times the very elect, it is not without interest to look back upon a period, when a smaller market was open to this nefarious trade, and to find that even then similar frauds were already common.

I do not purpose to write of the various devices contrived by those who tampered with works of art, but specially of two classes of imposture, frequently practised in the sixteenth and succeeding centuries. Firstly, we find the erroneous combination of an obverse design from the hand of a well-known artist, with a reverse unconnected with the subject and not due to the same medallist. Secondly, there is a far more heinous deception, that of making falsely signed copies from medals of early date—a fraud perpetrated by more than one person, whose names have remained a problem.

Two medallions in my cabinet appear to me to cast a little light upon these matters, and I am permitted to bring them before you in our plates. The memorial of Charles I is an example of a uniface portrait attributed

to Jean Varin, and apparently as the artist intended it to remain [Pl. X. 1], whilst an engraved matrix representing Mary Queen of Scots is an early eighteenth-century copy of an original by Primavera [Pl. XI. 1]. The discovery of the original medallion of Charles corrects a date of uncertain reading on a later mule; whilst the slate matrix, the work of a very young engraver, may supply a name to the author of subsequent frauds.

Several artists of the sixteenth and seventeenth centuries were much in the habit of producing uniface medallions—Jacopo Primavera and Jean Varin amongst others. Although the later in point of time I wish first to speak of Jean Varin, in connexion with the alteration to which his work was exposed, and afterwards of the copyist of Primavera. The medallion portraying Charles I, reproduced from my collection on Pl. X. 1, is a silver plaque, which no doubt Varin issued, as usual without any reverse,¹ little thinking that somewhat later an enterprising person, who deemed a completed medal would be more saleable, would reproduce it in combination with an unsuitable design. There is, however, in the British Museum an electrotype from a bronze specimen which was in the cabinet of Mr. Edward Pretty of Maidstone, who lent it for exhibition at a meeting of this Society in May, 1852. This specimen has a reverse decoration totally foreign to it.²

¹ This practice was not invariable, for Jean Varin's cast medal of Richelieu has a reverse, and so has the Bodley, *Med. Ill.*, i. 200, 28; if, indeed, this portrait be not rather, as M. Rondot claims, by Claude Varin than by Jean. This medal did not escape imitators.

² It is not known where the medal is now preserved. See *Med. Ill.*, vol. i. p. 292, No. 107, Pl. xxv. No. 4; and *Num. Chron.*, 1st Series, Vol. XV. p. 105.

The obverse representing Charles I is a cast taken from the same medallion as that shown on Pl. X. 1, and in that invaluable book, *Medallie Illustrations of British History*, is attributed to Jean Varin, but on the other side we find Aurora in a chariot, drawn by winged horses—the copy of the reverse of a medal executed, as is there stated, by Jacopo da Trezzo, of Ippolita Gonzaga, daughter of Ferdinando, Count of Guastalla, who died in 1563.³

In describing this combination of designs from the work of two artists, separated by nearly a century from one another,⁴ the authors of *Medallie Illustrations of British History* remarked that “it is very probable that, like most of Varin’s portrait medals, no reverse was ever executed by him for this one.” Owing to a slight flaw in the lettering, a mark across one of the figures upon the bronze medal, which is in less perfect condition than my silver plaque, the date of Charles I’s presentment was read as 1642, instead of 1649, and was so recorded in *Medallie Illustrations* (vol. i. p. 292, No. 107).

The legend upon the silver specimen runs as follows: CAROLVS · I · D · G · MAGN · BRIT · FRANC · ET · HIB · REX · ÆTATIS · SVÆ., the sentence remaining unfinished, and the King’s age unstated. A blank space upon the ornament pendant from the ribbon about the King’s neck suggests the possibility that the artist intended to engrave the missing number there.

In smaller lettering, too small to be clearly visible on our plate, we read the date 1649. The custom of dating

³ See *Museum Martuchellianum*, 1, Pl. lxx. 5.

⁴ Jacopo da Trezzo died in 1589, and the medal, as we see, was executed a quarter of a century before his death. Varin died in 1672, but his medal is of 1649.

his works in tiny figures was much followed by Varin, but it is just possible that the 16 has been inserted later, and the 49 referred to the years of Charles, thus completing the Latin sentence.⁵ On the truncation of the shoulder is incised "natus 1600," and with this exception the whole of the legend has been much tooled, portions of the field being cut away to bring out the lettering, especially as regards the date 1649.

The piece is not signed, but no doubt can be held as to its authorship if we compare it with other portraits executed by Jean Varin, whose activity during his residence in England produced several similar plaques which may be examined in the British Museum. Amongst these I may instance, as most nearly approaching Charles I's medallion in style, those of William Blake and his wife, which are exhibited in the Department of Coins and Medals.⁶

Jean Varin, or Warin, as his name is sometimes spelt, was born at Sedan in 1599, and studied under Guillaume Dupré. He was appointed engraver to the mint in Paris in 1646, and Superintendent General of the Coinage in 1648. He died in France in 1672, and the period of his English visit is earlier than the date engraved upon our medal, for we mostly find his medallions representing Englishmen dated between 1633 and 1636. Were it not that the numeral 1 after the name of Carolus in the legend suggests that this is a memorial, we might suppose that Varin worked from life and modelled the

⁵ Charles was born in November, 1600, and had therefore, at the time of his death, in January, 1648-9, recently entered upon his 49th year.

⁶ *Med. Ill.*, vol. i. pp. 270 and 271, Nos. 70 and 71, Pl. xxii. Nos. 11 and 12.

portrait during his stay in England, inserting the small figures, which read distinctly as 1649, after the execution of Charles. This substitution of a nine for an eight is natural, for it is evident that the plaque was issued in France, Varin having returned to that country, and the date of the King's death would be correct according to the new style of reckoning there in use, whereas upon medals struck in England the year would be registered as 1648.

The medallion came into my hands from the Sloane Stanley sale at Christie's in May, 1910, having passed through the Montagu and Murdoch cabinets, and having been figured in reduced size in the Montagu Catalogue on Pl. vi. No. 168. This catalogue contained a misprint, for the date of birth is there given as Natus 1649 on the truncation of the shoulder instead of 1600, the figures 1649 being in reality in the legend just beyond it.

Varin was not the only artist who suffered from this practice of altering his design by coupling with it the work of other medallists. To more than one example of Primavera's portrait plaques we find unwelcome additions, but by this form of garbling, for it is nothing more or less, the craftsman's reputation was not so much endangered as it was by the hand of the fraudulent copyist, who produced an inferior imitation and signed it *IA. PRIMAVE*. Let us turn again to the National Collection, and we shall find an interesting bronze medallion of Mary Queen of Scots (illustrated on Pl. I. 2), the genuine work of Primavera, an Italian artist of whom little is known.⁷ The probable date of

⁷ *Med. Ill*, vol i. p 118, No. 52.

his birth is given tentatively as 1544,⁸ and of his death as about 1600.⁹ The chief period of his activity lay in France and the Netherlands between 1568 and 1585, where he executed many medals, without, so far as we know, visiting England. Mr. Cochran-Patrick defines Primavera's Mary as "executed probably from a portrait taken in 1566-7," referring to the Morton picture traditionally said to have been painted during the Scottish Queen's imprisonment in Lochleven Castle.¹⁰ In *Medallie Illustrations* we find it catalogued under date 1572, on account of its similarity to a medallion of Elizabeth by the same artist approximately so dated, but the exact date of its production is therein left uncertain.

Mr. Cust in his *Authentic Portraits of Mary Queen of Scots*, attributes both the Morton picture and the medal to a later period—in fact, posterior to the Sheffield portrait at Hardwick, which is dated 1578,¹¹ calling attention to the medallion's general resemblance to the figure on the monument afterwards erected by James the First to her memory in Westminster Abbey, portraying Mary in her old age, and believes it to be a memorial.¹²

Be this as it may, the original plaque figured on Pl. X. 2, is very graceful, and the eighteenth-century imitations illustrated on Pl. XI. 1 and 2, do not approach it in beauty. However, unless placed side by side with

⁸ M. A. Chabouillet, *Mem. Soc. Arch. de l'Orléanais*, tom. xv. p. 231.

⁹ Forrer's *Dictionary of Medallists*.

¹⁰ *Catalogue of the Medals of Scotland*, Pl. i. No. 12.

¹¹ Cust, pp. 70-83 and 121.

¹² Mary was executed on February 8, 1586-7, and if Primavera survived until 1600, as is suggested in Forrer's *Dictionary of Medallists*, this is possible.

Primavera's uniface plaque, the copies are good enough to have deceived many persons in the past.

Two forms of tampering with the genuine piece appear in connexion with Primavera's work, for we find upon one specimen the introduction of an inappropriate reverse, a cast from the reverse of a medal of Ercole II d'Este, Duke of Ferrara, attributable to Pompeo Leoni, whilst the obverse is [Pl. XI. 2] not even absolutely faithful to the original, but is the effort of a more modern hand.¹³ Another mule presenting a portrait of Francis I (!) is said to have been in the collection of the late Mr. Cochran-Patrick,¹⁴ but it is not figured by him. He, however, engraves from his own cabinet an unsigned uniface example of somewhat smaller size with legend reading MARIA REG. SCOT. E. ANG.¹⁵ I have not seen these last-mentioned medals, but he distinctly states that he believes the British Museum specimen to be alone due to Primavera. Again, we have a uniface copy with the reading MARIA. STOVVAR. REGI. SCOTI ANGLI as in the original, even to the signature IA. PRIMAVE. varying only from the prototype in the hard lines of the portraiture and the fact that the letters are enclosed within an inner circle, running between plain engraved lines, instead of being in the field within the dotted border.

This piece and the obverse of the first-mentioned mule [Pl. XI. 2], present no important difference to each other, and even in the arrangement of the legend agree so exactly with the slate matrix in my collection that I venture to suggest that they proceed from the same

¹³ *Med. Ill.*, vol. i. p. 118, No. 52, var.

¹⁴ *Ibid.*, vol. i. p. 119, No. 54, var.

¹⁵ *Medals of Scotland*, Pl. i. No. 13, and pp. 14 and 15; and *Med. Ill.*, vol. i. p. 119, No. 54.

hand. Who, then, was the artist who so boldly signed the name of the dead Italian upon his reproductions?

A short time ago I acquired a carefully executed slate matrix [Pl. XI. 1], together with an electrotpe taken from it, but this matrix, instead of the forged signature which we have discussed, bears the words, "By S. Henning 1717. Done in his 14th year." It seems clear that in the pride of his early success as a copyist Henning affixed his name to his work, creditable enough to a boy of 13, but I fear that at a later date he was induced first to issue the medals of Mary which appear without any signature, and finally to copy Primavera's bronze plaque, even to the taking of the artist's name in vain. Are we, however, any further advanced, for we know nothing of S. Henning? The surname is not unfamiliar in the history of art, for John Henning, born at Paisley in 1771, was a distinguished modeller in wax, whose reduced copies of the Parthenon and Phigaleian friezes are well known. John Henning, who died in 1851, was the son of one Samuel Henning, a carpenter, and made his own reputation in a fair field. He did much excellent work, modelling wax medallions from life in the style of the Tassies, but usually cast in white biscuit porcelain. It would be unfair to suggest that John, an honourable sculptor, may have derived his artistic talents from another S. Henning, a more remote ancestor than his father Samuel, the similarity of initial being somewhat suggestive. We do not, however, even know the Christian name of our young engraver, who, according to the date upon the slate matrix, must have been born about 1704, being in his 14th year in 1717.

In closing these notes I should like to tender

my thanks to Mr. Grueber and Mr. Hill, under whose kind and courteous guidance I have compared the medallions in my cabinet with those in the National Collection, and to say that I owe to Mr. Grueber the first suggestion as to the similarity of workmanship between Henning's and the unknown forger's medals.

HELEN FARQUHAR.

MISCELLANEA.

LOSS OF MINORCA, 1756.—Two varieties of the medal issued on the loss of Minorca, 1756, are known. They appear as Nos. 13 and 14 on plate 176 of the plates to *Medallic Illustrations*, and as Nos. 394 and 395 of George II in that work. The obverse shows the figure of General Blakeney with the couplet, "Brave Blakney Reward—But to B—— give a cord," and the reverse shows the figure of Admiral Byng receiving a bag of money from an outstretched hand with the question: "Was Minorca sold by B—— for French Gold." No. 14 can be distinguished on the obverse by Blakeney's baton pointing to the ship, and on the reverse by Byng's figure being larger.

I now write to put on record an interesting and possibly unique specimen in my collection upon which the legend on the reverse as struck reads: "Minorca sold—For French Gold." This carries out what was obviously the intention of the designer of the medal, namely, that the reverse legend should like that on the obverse be read as a couplet.

This state of the reverse is interesting, but still more so is the fact that on my specimen the word "was" has been punched in in small sharp letters before the word "Minorca," while the word "by" and the letter "B" have been punched in on each side of Byng's figure, changing the couplet as struck into the question: "Was Minorca sold by B—— for French Gold" as struck on the published varieties.

As far as I can judge both the obverse and reverse dies of the unpublished specimen are the same as those used for

No. 14, and it would appear that the reverse die after striking the unpublished specimen was altered by cutting into it the letters as punched.

The illustrated specimen and my own specimen of No. 14 both have a flaw below the word "gold." The unpublished specimen shows no sign of this flaw, so that the reverse die probably broke after it had been altered.

To understand the reason for the alteration in the die it is necessary to refer to the dates.

Admiral Byng having failed to relieve the Island, returned, and arrived in England on July 26, 1756. He was at once arrested, and in December tried by court martial. The Court on January 27, 1757, sentenced him to be shot for neglect of duty, and the sentence was carried out on March 14.

On the other hand, General Blakeney, who was in command of the garrison, only surrendered upon condition that the garrison should not be taken prisoners, but should be sent to Gibraltar. He did not arrive in England until November 17, 1756. He was then knighted, and afterwards made an Irish Peer. On his death in 1761 he was buried in Westminster Abbey.

Upon the loss of the Island the popular feeling in England against Byng was very high, and the charge of treachery made in the design of the reverse of the medal and in the couplet, reflects that feeling.

A reference to the account of the court martial shows that no charge of treachery was made. As soon as it was known that no such charge would be made, the publisher of the medal evidently decided to tone down his reverse by altering the couplet containing a definite charge, into the form of a question, which, while still insinuating that there was treachery, suggested that Byng may not have been the culprit. After Byng's execution there seems to have been a considerable change in the public feeling, and it was said that he ought never to have been executed, for what merely amounted to an error of judgment.

The dies of the unpublished specimen were evidently prepared in the interval between Byng's return in July and Blakeney's return in November. The couplet was probably altered into the form of a question before any number of specimens were struck. Then in consequence of the failure of the reverse die at "Gold" the new dies for No. 13 were prepared and the bulk of the issued medals struck from these dies.

The size of the figure of Byng on No. 13 was considerably

reduced from that on No. 14, but this probably has no special significance. The issue would appear to have been made before Blakeney was rewarded with honours, and before it was known that Byng was to be shot and not hung with a cord.

In conclusion, it may be noticed that in November, 1756, Blakeney was an old man of 84, which the figure on the obverse certainly does not suggest.

F. WILLSON YEATES.

COUNTERMARKING OF BASE TESTONS.—Adverting to Mr. G. C. Brooke's note on this subject (*Num. Chron.*, 4th Ser. Vol. XIII. p. 130), I may observe that the engraver at the Tower Mint provided 955 stamps at 12*d.* each, in 1560, for marking the testons with the portcullis and greyhound (P.R.O. Declared accounts, Pipe Office 2185). A list of the towns in which the stamping was to be done is given among the Dom. State Papers of Elizabeth (vol. 14, No. 5). I noticed that Bristol, Wells, and Glastonbury were the only places mentioned in the south-west country.

HENRY SYMONDS.

CORRIGENDUM.

On page 37, lines 16 and 17 of note, for *Constantinopoli*. read
Constantinopoli.

X.

GREEK COINS ACQUIRED BY THE BRITISH MUSEUM, 1911-1912.

(See Plates XII., XIII.)

FROM the present article on Greek coins recently acquired by the British Museum, I have omitted those which are about to be published, sooner or later, in forthcoming volumes of the *Catalogue*. As it is the practice of the Department of Coins in its purchases to devote special attention to such fields as are not covered by the already published volumes of the *Catalogue*, this limitation means that some of the more interesting acquisitions of the years 1911 and 1912 do not appear in these pages. I have included no coins of Palestine, the volume dealing with which is now in the press, or of Cyrenaica, of which the catalogue may be expected from Mr. E. S. G. Robinson in a few years, or of the Macedonian kings, of whose coins large numbers have been recently acquired.¹

¹ In this connexion I may mention especially the generous gifts of thirty gold staters of Philip II and Alexander by Mrs. E. E. Deacon, and of fifty silver tetradrachms of Alexander III from the Damanhur hoard by Mr. E. T. Newell.

POPULONIA ETRURIAE.

Obv.—Beardless head r., with short curly hair; tore round neck; behind, XXV. Plain linear border.

Rev.—Plain.

Æ. 11 mm. Wt. 21.0 grs. (1.36 grms.).
[Pl. XII. 1.]

This specimen of a rare coin² is said to have come from Populonia.

CAPUA.

Obv.—Head of Zeus r., laureate; below, four pellets; border of dots.

Rev.—Winged thunderbolt; four pellets; border of dots.

Æ. 33 mm. ↗ Wt. 353.0 grs. (22.90 grms.).
[Pl. XII. 2.] From the Prowe Sale (Egger, 2, v. 1912), lot 47.

THURIUM.

Obv.—Head of Apollo r., laureate, with long hair.

Rev.—[Θ]ΟΥΡΙΩΝ (in exergue). Bull butting r.; above, ΙΩΙ.

Æ. 21 mm. ↓ Wt. 88.7 grs. (5.75 grms.).
[Pl. XII. 3.] From the Egger Sale, xxxix. (15, i. 1912), lot 56.

This coin is apparently from the same dies as another specimen also recently sold at Vienna (Egger, xli, 18, xi. 1912, lot 74). It belongs to the period of reduced weight, after 281 B.C.,³ but the style of the Apollo head is unusually fine for the time, as may be seen by comparing it with the careless work of other

² A. Sambon, *Monn. Ant. d'Italie*, p. 38, No. 4.

³ Cp. Evans, *Horsemen of Tarentum*, p. 228.

specimens, such as that previously in the British Museum.⁴

CAULONIA.

Obv.—Nude Apollo moving rapidly to r. (holding, as usual, branch in r., small winged figure in l.); in field r. stag on pedestal; l. bull's head facing, surrounded by olive (?) branches, which appear to spring from a stem.

Rev.—KA AT AM Stag r; fillet border.

Æ. 19·5 mm. → Wt. 102·6 grs. (6·65 grms.).
[Pl. XII. 4.]

The tree with branches framing the bull's head on the obverse is not noticed by Garrucci, who publishes a similar specimen, Pl. cxi. 19. On most Cauloniate coins Apollo's position is that of standing or at the most striding; here both knees are slightly bent as on *B. M. C.*, No. 25.

SEGESTA.

Obv.—ΣΕΓΕΣΤΑΙΒ (in exergue). Quadriga moving slowly to r., driven by female figure; the four horses indicated by doubling the outlines of the legs of a pair; the driver holds in her raised r. a bunch of three ears of corn.

Rev.—ΕΓΕΣΤΑΙ (on l. upwards) ON (on r. downwards). Nude hunter standing r. with two dogs (usual type, the ithyphallic herm off the flank).

Æ. 28·5 mm. ← Wt. 253·5 grs. (16·43 grms.). [Pl. XII. 5.]

This coin belongs to the rare earliest class of the Segestan tetradrachms, placed by Lederer⁵ between

⁴ Head, *Guide*, V. C. 18.

⁵ *Die Tetradrachmenprägung von Segesta* (1910), pp. 18 f.

454-53 and 426 (?). The obverse is apparently from the same die as his No. 3, and shows that the inscription should be read as given above, and not without the last two letters.

SELINUS.

Obv.—Leaf of wild celery.

Rev.—Incuse square divided into eight triangles by lines crossing in the centre.

R. 23 mm. Wt. 135.3 grs. (8.77 grms.).
[Pl. XII. 6.]

This didrachm is said to have come from a small hoard found in Malta. The rendering of the leaf is unusual, and does not show the feathery appearance which is found on other specimens, nor is the division between the three lobes carried out distinctly. But there seems to be no reason to doubt the genuineness of the coin.

SYRACUSE.

The fine specimen of the well-known medallion illustrated on Pl. XII. 7, was generously presented to the Museum by Mr. Henry Van den Bergh, through the National Art Collections Fund. It was purchased at Vienna, at Egger's sale of the Fenerly Bey, &c., Collections.⁶

The fact that at least five ⁷ specimens of this medallion, struck after the fracture of the obverse die, exist, shows that the Syracusans were not offended by the appearance

⁶ *Katal.* xli. lot 152.

⁷ (1) "Late Collector," Sotheby, May, 1900, lot 153; (2, 3) Hirsch, *Katal.* xxxii. lots 316, 317; (4) the Paris specimen, *Rev. Num.*, 1913, Pl. i. 174; (5) the coin here illustrated.

produced by the fracture. To a modern eye also, accustomed to the work of Rodin, the suggestion of a mass of rock, out of which the head rises, is distinctly attractive.

The reverse die from which this medallion was struck was also used for the following pieces :—

1-4. The four mentioned above from the same broken obverse die.

5-6. The Paris medallion and that from the Santa Maria hoard published by Sir Arthur Evans.⁸

7. The specimen in the British Museum, *Sicily*, No. 204.

8. Hirsch, *Katalog* xxxii. lot 313.

9. Du Chastel, Pl. xvi., No. 143.

Its peculiarity lies in the double signature, ΚΙΜΩΝ, on the upper edge of the exergual line (of which practically no traces survive on most specimens), and $\frac{\text{IM}}{\text{M}}$ in the field below the reins. The die is otherwise easily identified by two flaws: a small one between the sixth and seventh hooves (counting from the left), and a crack proceeding downwards from the exergual line just below the near wheel of the chariot.⁹

Of the five pieces from the same broken obverse die, the Paris specimen (No. 4 in the above list) seems to be the earliest; nearly the whole of the dolphin behind

⁸ *Syracusan "Medallions,"* p. 200, and Pl. ii. fig. 1.

⁹ The writer of the text of the "Choix de Monnaies grecques du Cabinet de France," now appearing in the *Revue Numismatique* (1913, pp. 12 f.), states that his No. 173 is from the same reverse die as his No. 174, which is from the fractured obverse die. In his illustration, however, I can see no trace of the characteristic flaw between the horses' hooves, and the flaw in the exergue seems to differ from that on the nine other coins. Indeed, the reverse die of Paris 173 seems to be the same as that which was used for No. 202 in the British Museum; both coins are also from the same obverse die.

Arethusa's head is still clear of the flaw, which is, however, running into her back hair. Then comes the Hirsch specimen (No. 2); the flaw has spread considerably, but the dolphin is still discernible, and would be plainer if it were not partly off the flan. Between the three other specimens there is little to choose. It would be interesting to find a medallion struck from this obverse die before the fracture began, if indeed it did not break at the outset.

ACANTHUS.

Obv.—Lion r., bringing down bull l.; dotted exergual line; border of dots.

Rev.—Mill-sail incuse square.

R. 22·5 mm. Wt. 256·5 grs. (16·62 grms.).
 [Pl. XII. 8.] From the Taranto hoard (*Rev. Num.*, 1912, p. 13, No. 27, Pl. ii. 7).

The greater part of the exergue being off the flan, it is not possible to say whether it contained the acanthus-flower. The coin differs from the ordinary early Acanthian series in fabric, being dumpy, instead of flat. Mr. Robinson also points out to me the difference in the treatment of the bull, as seen in the skin of the neck, which is rendered in parallel folds, and not in three rows of curls as on nearly all the other Acanthian tetradrachms. In fact, in this respect it approaches some of the Thraco-Macedonian coins (*e.g.* Head, *Guide*, Pl. 5, Nos. 15, 17), &c. M. Babelon places the piece at the head of the Acanthian series, and that certainly seems to be the only place for it.

THESSALY.

From a hoard recently discovered near Larissa the Museum acquired 75 double-victoriates and drachms of the Thessalian League. Among the double-victoriates are the following on which the magistrates' names may be recorded as of interest :—

Obv.—Head of Zeus.
ΣΩΣΙΠΑΤΡΟΥ

ΛΥΚΟΦΑΝΤΟΣ (?)

ΙΠΠΑΙΤΑΣ
ΜΕΝΕΔΗΜΟΣ
ΣΩΣΙΒΙΟΥ

Rev.—Fighting Athena.
[Α]ΛΚΕΤΗΣ
ΑΛΕΞΙΠ[ΠΟΣ] ΗΡΑ ΝΙΚΑΤΩΡ
ΑΜΥΝΑΝΔΡΟΥ
ΔΙΚΑΙΟΣ ΟΝΑΣΙΜΒΡΟΤΟΣ
[Ε]ΥΚΟΛΟΣ ΑΝΤΙΓΟΝΟΣ
ΚΡΑΤΕΡΟΦΡΟΝΟΣ
ΑΜΥΝΑΝΔΡΟΣ
ΚΡΑΤΙΠΠΟΥ ΝΙ
ΠΑΥΣΑΝΙΑΣ ΝΙ
ΦΕΡΕΚΡΑΤΗΣ ΝΕΩΤΕΡΟΣ
ΣΙΜΥ

DAMASTIUM.

Obv.—Head of Apollo r. laureate, with long hair.

Rev.—Tripod with lion's feet on basis; on l., dagger, blade upwards; on basis, ΗΡΑΚΛ; on r. upwards, ΕΙΔΟ; on l. upwards, ΚΗ

Æ. 27 mm. ↑ Wt. 198·7 grs. (12·88 grms.).
[Pl. XII. 9.] From the Prowe Sale (lot 841).

For this variety of the coinage of Damastium, which is without the ethnic, see Imhoof-Blumer, *Z. f. N.*, i. p. 110. The magistrate's name ΚΗ (for *Κηφισοφῶντος*)¹⁰ fixes it to Damastium rather than Pelagia.

¹⁰ *Z. f. N.*, xxi. p. 258.

CORINTH.

Obv.—Pegasus flying l. ; below, ♀

Rev.—Head of Athena r. in Corinthian helmet ; behind, ivy-leaf.

Æ. 22 mm. ↑ Wt. 131.6 grs. (8.53 grms.).
[Pl. XII. 10.]

In addition to this the two staters from the Egger Sale, xxxix. (1912), lots 289, 290, are now in the British Museum (symbols, vine-leaf and aphlaston). The former, however, has no ♀, and, as Mr. Robinson points out to me, is probably Sicilian [Pl. XII. 11].

Obv.—MAVRANT ONINCAVG (*sic*). Bust of M. Aurelius r. laureate, wearing paludamentum and cuirass ; border of dots.

Rev.—CLI COR Palaemon on dolphin to r. ; border of dots.

Æ. 25 mm. ← Wt. 163.3 grs. (10.58 grms.).
[Pl. XII. 12.] From the Prowe Sale, lot 1052.

The mistake in the emperor's name, which is doubtless due to the engraver being a Greek, occurs on other coins, *e.g.* *B. M. C.: Corinth*, Nos. 613 and 616 (where, however, it has escaped notice). The obverse die of these two is the same, but differs from that of the new coin.

Obv.—PLAVTILLA AVGVSTA Bust of Plautilla r. ; border of dots.

Rev.—CLICOR Artemis huntress r., in temple with four columns and central arch ; on either side a slender leafless tree, its branches overshadowing the temple ; border of dots.

Æ. 23.5 mm. ← Wt. 70.7 grs. (4.58 grms.).
[Pl. XII. 11.] From the same collection, lot 1053.

This appears to be the identical coin figured in Imhoof and Gardner's *Numismatic Commentary*, Pl. D. lxviii.

NICAËA.

Obv.— - - - ΟΥΗΜΑ ΞΙΜΕΙΝΟϢΑΥ Bust of Maximinus r., laureate, wearing paludamentum and cuirass.

Rev.—ΝΙ ΚΑΙ [ΕΩ]Ν Nicaea, wearing turreted crown, standing r., holding in r. kantharos, resting with l. on filleted thyrsos. In countermark, figure of Nike r., holding wreath.

Æ. 26 mm. ↑ Wt. 118·3 grs. (7·67 grms.).
[Pl. XIII. 1.] From the Leitner Sale, 1911, lot 85.

The *Recueil* gives no instance of this type under Maximinus or Maximus. The staff on which the goddess rests is meant for a thyrsos, although its head is hardly visible.

Obv.— - - - ΙΒΓΑΛΛΟϢΑΥΙ (*sic*) Bust of Trebonianus Gallus r., radiate, wearing paludamentum and cuirass.

Rev.—ΝΙΚΑ - - Hades-Sarapis seated l., l. resting on sceptre, extended r. pouring wine from phiale^(?); at his feet, Kerberos.

Æ. 24 mm. ← Wt. 99·2 grs. (6·43 grms.).
[Pl. XIII. 2.] From the Leitner Sale, *ibid*.

Obv.—ΠΟΥΛΙΚΟΥΑΛΕΡΙΑΝΟϢΑΥ Bust of Valerian r., radiate, wearing paludamentum and cuirass.

Rev.—ΔΙΟΝ[ΥϢΟϢ?]Ν Ι ΚΑΙΕΥ[Ν] Dionysos, nude, standing l., holding kantharos in r., resting with l. on filleted thyrsos. In oval countermark, head of an emperor r.

Æ. 25 mm. ↑ Wt. 112·4 grs. (7·28 grms.).
[Pl. XIII. 3.] From the Leitner Sale, *ibid*.

Obv.—ΠΟΥΛΙΟΥΑΛΕΡΙΑΝΟΥΣΣΕ Bust of Valerian r.,
radiate, wearing paludamentum and cuirass.

Rev.—ΝΙΚΑ Ι ΕΩΝ Athena, helmeted, standing l., hold-
ing Nike in r., shield and spear in l.

Æ. 23 mm. ↑ Wt. 89·9 grs. (5·83 grms.).
[Pl. XIII. 5.] From the Leitner Sale, *ibid.*

Obv.—ΓΠΟΝΒΑΙΚΕΓΝΓΑΛΛΗΝΟΥΣΑΥΓ Bust of Gallienus
r., radiate, wearing paludamentum and cuirass.

Rev.—ΝΙ ΚΑ Ι ΕΩΝ Demeter (?) seated l., resting with
l. on knotted sceptre or torch, holding in ex-
tended r. ears of corn.

Æ. 26 mm. ↑ Wt. 146·6 grs. (9·50 grms.).
Countermarked ∓ on obv. [Pl. XIII. 6.]

Æ. 25 mm. ↑ Wt. 108 grs. (7·00 grms.).
From same dies as preceding. Both from the
Leitner Sale, *ibid.* Compare the standing type,
Recueil, Pl. lxxxvii. 27.

Obv.—ΠΟΛΙΕΓΝΓΑΛΛΗΝΟΥΣΑΥΓ Bust of Gallienus r.,
radiate, wearing paludamentum and cuirass.
In countermark, ∓

Rev.—ΝΙΚΑ Ι Ε Ψ Ν Nicaea standing to front, holding
in each hand extended a prize crown, and wear-
ing another on her head.

Æ. 24 mm. ↑ Wt. 128·7 grs. (8·34 grms.).
[Pl. XIII. 7.] From the Leitner Sale, *ibid.*
This reverse appears to be from the same die as
that of the coin of Valerian, *Recueil*, Pl. lxxxvii. 6.
On the type, see Imhoof-Blumer in *Nomisma*, v.
p. 42; vi. p. 2.

Obv.—ΚΟΡΝΕΑΛ[Ω]ΝΙΝΑΣΕΒ Bust of Salonina r.

Rev.—ΝΙ[ΚΑ]ΙΕ ΨΝ Table with curved legs, supporting
three prize crowns, the centre one piled up with
six balls, the others containing palm-branches;
below the table ΠΥΘΙΑ | ΣΕΥΗΠΙ | Α | ΑΓΟΥ ΣΙΑ
In countermark, head of an Emperor r.

Æ. 25 mm. ↓ Wt. 88·8 grs. (5·75 grms.).
[Pl. XIII. 4.] From the Leitner Sale, *ibid.*
This reverse is from the same die as those of

the two coins of Gallienus and Salonina, *Recueil*, 852 and 863. ΑΓΟΥΕΙΑ (for ΑΥΓΟΥΕΤΙΑ) should therefore be added to the legend of the former, and ΠΥΘΙΑ to that of the latter.

CYZICUS.

Obv.—ΑΥΚΑΙΜΑΥΡΕΥΗΡΟCΑΝΤΩΝΕΙΝΟCCE Bust of Caracalla r., with short beard, wearing paludamentum and cuirass.

Rev.—CΤΡΑΝΟΥΜΙΖΩΙΑΟΥ and in exergue ΚΥΖΙΚΗΝΩΝ | ΝΕΟΚΟΡΩΝ Imperial galley to l., with double ram, keleustes and rowers; on the prow is an uncertain object resembling an altar; on the poop, two standards and stylis (?).

Æ. 35 mm. ↑ Wt. 310·0 grs. (20·09 grms.).
[Pl. XIII. 8.] From the Leitner Sale, *ibid.*

Babelon¹¹ and Kubitschek¹² have discussed the significance of the representation of the imperial galley on a Cyzicene "medallion" of Commodus; the type appears to be connected with a visit of the imperial family to Cyzicus in summer 175. Similar types occur on other coins of Caracalla,¹³ and the galley with standards is, indeed, a common Cyzicene type; but whether it always refers to an individual visit of an emperor or a governor is a question that requires further consideration. Caracalla, as Hasluck has remarked,¹⁴ may well have visited Cyzicus in 214 A.D.

¹¹ *Rev. Num.*, 1891, pp. 27 ff.

¹² *Num. Zeit.*, 1911, p. 15.

¹³ Mionnet, *Supp.*, v. p. 340, Nos. 377-379.

¹⁴ *Cyzicus*, p. 189.

UNCERTAIN OF IONIA.

Obv.—Sphinx with curled wing seated l., r. foreleg raised.

Rev.—Gorgoneion in deep incuse square; outside the square, below, a small rectangular incuse impression.

R. 14.5 mm. ↗ Wt. 49.1 grs. (3.18 grms.).
[Pl. XIII. 9.]

This was purchased at Smyrna, and is clearly Ionian in style. The Gorgoneion is not dissimilar from that which is found on the later silver coins attributed to Clazomenae.¹⁵ The sphinx, of course, suggests Chios, although the Chian sphinx seldom raises its foreleg.¹⁶ The weight of the coin may be a "Phoenician" or a Chian or a Samian drachm;¹⁷ its date may be placed in the first quarter of the fifth century.

EPHESUS.

The following magistrates' names, occurring on Ephesian tetradrachms of the period 394–301 (according to Head's dating) acquired by the Museum since the publication of the *Catalogue of Ionia*, may be noted as either unpublished or confirming previous readings:—

(1) Bee with curved wings:

BAOKIΔEV

ΦΩΚΥΑ - - - (apparently struck over another name ending in ΠΙΜ)

¹⁵ *B. M. C. : Ionia*, p. 14, Nos. 15, 16, Pl. vi. 4, 5.

¹⁶ An exception is the electrum coin in Babelon, *Traité*, iii. Pl. viii. 9. For sphinxes with the foreleg raised cp. the same book, Pl. xxviii. 11–13 (the last is surely Lycian).

¹⁷ *B. M. C. : Ionia*, p. xxxvii f.

(2) Bee with straight wings :

ΔΙΟΤΙΜΙΔΑΣ (cp. Wadd., 1518) ΦΙΛΟΛΕΩ[Σ]

ΞΩΒΙΟΣ

ΦΥΛΑΚΟΣ (cp. Wadd., 1542).

Another new Ephesian magistrate is ΑΡΙΣΤΟΝΟΜΟΣ on a bronze coin similar to *B. M. C.*, Nos. 58 ff.

CNIDUS.

Obv.—Lion's head and r. foreleg r.

Rev.—Female head r., with hair rolled behind, in deep incuse square.

Æ. 0.75 mm. ↓ Wt. 6.6 grs. (0.43 grm.).
[Pl. XIII. 10.]

A charming hemiobol of about 400 B.C., and presumably to be classed with Nos. 20–23 in the *British Museum Catalogue* (period 412–400), although the treatment of the obverse is in some respects closer to the style of the next period.

FLAVIOPOLIS IN CILICIA.

Obv.—ΙΟΥΛΙΑΜΑΜΑΙΑCΕΒ Bust of Mamaea r.

Rev.—ΦΛΑΟΝΙΟΠΟ - - ΩΝΕΤ and vertically in centre
Γ
of field P The Dioscuri, nude, leaning on
N
spears, joining hands.

Æ. 23 mm. ↓ Wt. 129.2 grs. (8.37 grm.).
[Pl. XIII. 11.]

The date ΓΝΡ = 225–6 A.D. occurs on another coin of Mamaea¹⁸ and on coins of Sev. Alexander and Orbiana.¹⁹

¹⁸ Babelon, *Inv. Wadd.*, 4297.

¹⁹ Imhoof-Blumer, *Kleinas. Münzen.*, ii. p. 445.

The type of the Dioscuri is also found on a coin of Trajan,²⁰ but there they have the crescent (for Helen) between them.²¹

TARSUS.

Obv.— - - AVPANTΩNEINCE Bust of Elagabalus (?)
r., laureate, undraped.

Rev.—ΤΑΡΧΟΥΤΗΜΗΤΡΟΠΟΛΕ Wreath of demi-
ourgos, within which ΔΗΜΙ; below, ΓΒ.

Æ. 26.5 mm. ↑ Wt. 107.0 grs. (6.93 grms.).

This coin confirms the reading of Waddington, 4643; but the features seem to me to resemble Elagabalus rather than Caracalla, to which emperor M. Babelon assigns the Waddington specimen. Both Emperors held the title of demiourgos at Tarsus.²²

CAESAREA CAPPADOCIAE.

A good specimen of the bronze coin of Claudius described by Imhoof (*Monn. grecques*, p. 417, No. 182) was acquired in 1912. In *B. M. C.: Cilicia* (p. 31, No. 4) this coin was attributed doubtfully to Anazarbus, in ignorance of Imhoof's previous attribution to Caesarea. It is interesting now to note that the newly acquired coin was purchased at Anazarbus itself by the person who sold it to the British Museum.

²⁰ Babelon, *loc. cit.*, 4284.

²¹ See *B. M. C.: Lycaonia*, &c., p. cviii note; cp. *J. H. S.*, xxxi. p. 62.

²² *B. M. C.: Lycaonia*, &c., p. xcvi; Wroth, in *Num. Chron.*, 1902, p. 343.

ANTIOCHUS I OF SYRIA.

Obv.—Head of Athena r., wearing crested Corinthian helmet, adorned with coiled serpent; her hair in formal curls.

Rev.—ΒΑΣΙΛΕΩΣ | ΑΝ ΤΙΟΧΟΥ Nike standing l., carrying wreath and standard; in field l., monogram, Ϟ

Α. 18.5 mm. ↑ Wt. 132.8 grs. (8.61 grms.).
[Pl. XIII. 12.]

The four gold staters of Antiochus I in the British Museum which bear his portrait have the reverse die inverted as regards the obverse. They were probably struck in the East, where that arrangement was fashionable.²³ The present stater, with Alexandrine types, has both dies in the same position. Whether this points to a Western mint I cannot say. The die-positions of the Alexandrine silver of the same reign seem to follow no fixed rule. Of the tetradrachms in the British Museum two are ↑, one ↓; of the drachms, one is →, the other ↑; and a half-drachm is ←.

ANTIOCHUS IV OF SYRIA.

Obv.—Head of Zeus Osiris r., laureate; the wreath is decorated in front with the "cap of Osiris" (?),²⁴ and its tie is treated like a diadem, with one end flying behind, the other coming over r. shoulder; border of dots.

Rev.—ΒΑΣΙΛΕΩΣ | ΑΝΤΙΟΧΟΥ on r. downwards, ΘΕΟΥ | ΕΠΙΦΑΝΟΥΣ on l. downwards. Eagle with closed wings standing r. on thunderbolt.

Æ. 36.5 mm. ↑ Wt. 574.8 grs. (37.25 grms.). [Pl. XIII. 13.]

²³ Macdonald, in *Corolla Numismatica*, p. 187.

²⁴ See Gardner, *B. M. C. : Seleucid Kings*, p. 38.

An unusually well-preserved and patinated specimen of a well-known coin. Attempts have been made to see in the head of Zeus on the tetradrachms of this Antiochus a reproduction of the features of the King. As Babelon remarks,²⁵ all that can be said is that the features of the god are intentionally brought into a certain resemblance to those of the King. On the other hand, the not very usual treatment of the tie of the laurel-wreath seems to recall the regal diadem.

SELEUCUS IV OF SYRIA.

Obv.—Head of King r., diademed; border of dots.

Rev.—ΒΑΣΙΛΕΩΣ | ΣΕΛΕΥΚΟΥ Apollo seated l. on omphalos, holding arrow in r., resting l. on bow; above and in exergue, thunderbolts; in field r. H; l. monogram, Ψ and laurel-branch.

$\mathcal{R}$ plated. $\downarrow$ 30 mm. Wt. 233.2 grs.
(15.11 grms.). [Pl. XIII. 14.]

The tetradrachms of Seleucus IV with Apollo on the omphalos as reverse type fall into two groups; in the one, the king's diadem falls straight, and the border is of dots (*B. M. C. : Seleucid Kings*, p. 31, Nos. 1, 2); in the other, one of the ties of the diadem flies backward and upward, while the other comes forward over the right shoulder, and the border is a fillet. In the former class there is usually a symbol behind the head—a wreath on *B. M. C.*, Nos. 1, 2, and on the Bunbury specimen²⁶ now in the British Museum, and perhaps also on at least one of the Paris specimens.²⁷ In regard

²⁵ *Rois de Syrie*, p. xcvi.

²⁶ *Sale Catal.*, ii. lot 484.

²⁷ Babelon, *Rois de Syrie*, p. 62, No. 475, pl. xi. 14: in the illustration I see traces of something behind the head.

to the diadem and border the present coin belongs to the former class, but it has no symbol on the obverse; for this, however, compensation is made on the reverse by the duplicated thunderbolt and the laurel-branch. So, too, on the coins of the second class, since there is no room for a symbol on the obverse, two (wreath and palm-branch) are put together on the reverse. This coin seems to be transitional between the two classes.

A few days after the above was written, I was shown in a private collection formed in Persia a tetradrachm of Seleucus IV, with an obverse of the more usual kind, and a reverse exactly similar to the present one. But the coin was distinctly suspect, being either struck from false dies (of which the reverse may have been made from one similar to our own) or else a very fine cast.

ARMENIA: ARTAVASDES III (?).

Obv.—Bust of King r., wearing Armenian tiara, adorned with a globe between two eagles; behind, a small Nike flying holds out a wreath to crown him.

Rev.—BAΣ - - above, ΜΕΓΑΛΟY downwards on l., [APT]ΑΙΑΣΔΟ[Y] below. On r., the King, wearing trousers, standing l., resting with l. on sceptre, extending r. to city-goddess, who kneels before him; in the field between them, M

Æ. 17 mm. ↑ Wt. 47·3 grs. (3·06 grms.).
[Pl. XIII. 15.]

The profile of the portrait on this coin is unfortunately lost, so that it is impossible to compare it with the portraits on coins attributed to Artavasdes I and III; but the legend corresponds to that on the silver denarius²⁸ of the latter king (1 being a mere blunder

²⁸ B. M. C.: *Galatrea*, &c., Pl. xiv. 3.

for Y in the King's name). At the same time it is not impossible that the coin may have been struck by his father, Artavasdes II,²⁹ the opponent of Tigranes III. The reverse type is a modification of one used by the Parthian kings in the first century B.C.; thus, on coins of Orodes I the city-goddess kneels before the *seated* king,³⁰ and the same type occurs under Phraates IV.³¹ Our coin is too badly executed for us to see whether the goddess holds anything in her hands.

*
HISPANO-CARTHAGINIAN.

Obv.—Head of Heracles l., laureate, with curly beard; large club over r. shoulder; border of dots.

Rev.—Elephant walking r., driven with a hooked goad by a rider who wears a long cloak; border of dots.

℞. 26 mm. ↑ Wt. 227·4 grs. (14·74 grms.).
[Pl. XIII. 16.]

This coin belongs to the important series of coins issued by the Barcids in Spain (doubtless from the mint at Carthago-Nova) to which due attention was first called in 1863, in connexion with the find of Mazarrón.³² Two specimens from that find weighed 14·83 and 14·75 grammes respectively. Ours was found in 1910 at Mogente,³³ in the province of Valencia. The denomina-

²⁹ It was to this king that Gardner attributed the silver denarius just mentioned.

³⁰ *B. M. C. : Parthia*, p. 72, Nos. 30, 31, Pl. xiv. 10, 11.

³¹ *Ibid.*, p. 101, No. 11, Pl. xix. 1.

³² Zobel de Zangroniz, in *Monatsber. der k. Akad. der Wiss.*, 1863 (June), pp. 248 ff.; cp. *Memorial Numismatico Español*, iv. pp. 160 f., 177 f.

³³ See *Boletín de la R. Acad. de la Historia*, June, 1910.

tion is the tetradrachm, two-thirds of the hexadrachm or largest coin of the series, which, according to Hultsch, weighs normally 23·39 grammes ;³⁴ the normal weight of these coins should therefore be 15·59 grammes.

³⁴ See Hultsch, *Metrolgie*², p. 425.

G. F. HILL.

XI.

CHRONOLOGY OF THE DANUBIAN WARS OF THE EMPEROR MARCUS ANTONINUS.

(See Plate XIV.)

(Continued from p. 199.)

THE opening of a fresh campaign in 173 is indicated by an abbreviated *profectio* type; I describe an example in the British Museum:⁸¹

N. Obv.—M. ANTONINVS AVG. TR. P. XXVII. Bust r., laureate and loricæ.

Rev.—IMP. VI. COS. III. The emperor paludate on horseback r., raising r. hand.

There is no difficulty in the identification, and the type clearly marks a fresh departure in the war. But it also raises the question, whether a *profectio* means necessarily a departure from the city. If it does, then the evidence of the coins flatly contradicts Dio,⁸² who states that on the emperor's return to the city in December, 176, he had been absent for eight years. I leave the point in doubt for the present; other types will occur which raise the same difficulty. At all events, a fresh stage in the war is opened in 173. Following the precedent of 170, we look next for a type illustrating

⁸¹ Cf. Cohen, II. *M. A.*, 302.

⁸² *Epit. Dion. Cass.*, lxxi. 39.

the progress of the campaign. Instead of the fighting Minerva, we have this year a more august figure joining in the fray. I describe a large bronze medallion at Berlin:⁸³

Æm. Obv.—M. ANTONINVS AVG. TR. P. XXVII. Bust r., laureate and loricæ (seen from behind).

Rev.—IMP. VI. COS. III. Jupiter, nude, in *quadriga*, galloping r., with r. hand hurling *fulmen*; beneath horses' feet to r., figure in slight garment kneeling r., with face turned towards spectator, holding in r. hand spear, in l. hand shield, which rests on ground.

[Pl. XIV. 7.]

Jupiter of the Capitol has more than once been appealed to. This is the first time he has been represented as actually taking part in the combat. Is there any special reason for this? Again I leave the question open, pending the consideration of other types. There is another Jupiter type of this year:⁸⁴

Æl. Obv.—M. ANTONINVS AVG. TR. P. XXVII. Bust r., laureate and loricæ (seen from behind).

Rev.—IMP. VI. COS. III. S.C. Jupiter, nude to waist, cloak hanging from shoulders and falling over knees, seated l. on throne, holding in l. hand sceptre, in r. hand Victory.

This is the type of the Phidian Zeus at Olympia. Here it does duty for Jupiter Victor, parallel to Roma Victrix. An identical type on the coins of Commodus for 180 is inscribed IOVI VICTORI. The god who fought the campaign, then, brought it to a victorious issue.

⁸³ Cf. Cohen, II. *M. A.*, 310. Cohen, however, gives IMP. VII. on the reverse, an impossible reading: IMP. VI. is quite clear on the Berlin example.

⁸⁴ Cf. Cohen, II. *M. A.*, 247.

In this year, therefore, as in 170, we have a series of coins presenting the opening, the progress, and the successful close of a campaign, but again, as in 170, there is no *salutatio*. We may take it that the campaign of 173, like that of 170, was an inconclusive one. So much, I think, these three coins settle, but there are several other types of this year which demand consideration. Several types of the Marcomannic victory belonging to the previous year are repeated. They include the common types of Roma Victrix⁸⁵ and Victory with palm and wreath,⁸⁶ and the special type of Germania Subacta.⁸⁷ I have already described a type of 173 closely akin to this, inscribed GERMANICO AVG., and commented on its significance in relation to the war of 170-172. There are two other types alluding to a German victory which closely cohere with those I have already mentioned, and must, I think, be brought into the same relation. The first I transcribe from Cohen:⁸⁸

Æ. *Obv.*—M. ANTONINVS AVG. TR. P. XXVII. Bust r., laureate and loricæ, with aëgis on breast.

Rev.—VICT. GERM. (in exergue) IMP. VI. COS. III. (above). Victory in *quadriga*, stepping l., looking backwards.

The other I describe from bronze coins at Berlin:⁸⁹

*Æ*¹. *Obv.*—M. ANTONINVS AVG. TR. P. XXVII. Head r., laureate.

⁸⁵ Cf. Cohen, II. *M. A.*, 283.

⁸⁶ Cf. Cohen, *ibid.*, 261.

⁸⁷ Cf. Cohen, *ibid.*, 214. The Berlin collection has four silver coins bearing the type of Germania Subacta—a weeping captive by a trophy—without the inscription. Cohen does not give the coin; it appears first in the present year.

⁸⁸ Cohen, II. *M. A.*, 993.

⁸⁹ Cf. Cohen, *ibid.*, 995.

Rev.— VICT. }
 GERMA. }
 IMP. VI. } in laurel wreath.
 COS III }
 S. C. }

There is nothing in the coinage of this year to indicate whether the types in question belong to its earlier or later months. Two of them recur in the following year.⁹⁰ Yet the explicit reference to the "German Victory" seems to associate them definitely with the war which won the title Germanicus, the *Bellum Germanicum sive Marcomannicum*. The following coin, too, seems to me to have unmistakable reference to the Marcomannic victory:⁹¹

Æ¹. *Obv.*—M. ANTONINVS AVG. TR. P. XXVII. Head r., laureate.

Rev.—RESTITVTORI ITALIAE IMP. VI. COS. III. (margin) S C. (exergue). The emperor in *lorica*, *paludamentum*, and boots, standing l., holding sceptre in l. hand, and giving r. hand to female figure in turreted crown and tunic, kneeling r. on r. knee, and holding globe in r. hand. *

The coin is a dedication to the emperor as the Restorer of Italy, and in some sense a companion to the other dedication to the Conqueror of Germany (GERMANICO AVG.). They represent the two sides of the Marcomannic victory, the subjugation of Germany and the restoration of the integrity of the northern frontier of Italy. This at least is a possible interpretation of the coin, and one suggested by comparison with other coins of the year, and it is far more probable than a reference to benefactions to the country in the way of alimentary foundations

⁹⁰ Cohen, *l.c.*, 226, 994.

⁹¹ Cf. Cohen, *l.c.*, 538; Eckhel (vii. p. 58) gives the same type for 169; this coin is not recognized by Cohen, but would be quite in place.

or subventions to agriculture, or any other administrative measures. Alongside of this coin may be placed another which seems to have a similar reference, and is fairly common in this year: ⁹²

Æ². *Obv.*—M. ANTONINVS AVG. TR. P. XXVII. Bust r., laureate and loricæ (seen from back).

Rev.—SECVRITAS PVBLICA IMP. VI. COS. III. S. C. Female figure in χιτών and ἱμάτιον, standing r., supporting with l. hand long palm branch, and raising l. hand to head.

The large collection of types of the German victory appearing in this year, and parallel to the Parthian types of 167, somewhat suggests a triumph, and this is more distinctly suggested by the following medallion: ⁹³

Æ^m. *Obv.*—M. ANTONINVS AVG. TR. P. XXVII. Bust l., laureate, seen from back; aegis on l. shoulder, strap over r. shoulder, spear visible over l. shoulder.

Rev.—IMP. VI. COS. III. (upper margin) ADVENTVS AVG. (exergue). Procession scene: r., triumphal arch, surmounted by *quadriga* of elephants; l., flaming altar, and in background temple, of which only three columns and half the pediment are visible; still further in the background l., another building; in foreground, centre, the emperor, wearing *lorica*, *paludamentum*, and boots, walking r., holding spear, and over l. shoulder, trophy; he is preceded by two *signiferi*, of whom one wears cap and *lorica* and walks r. looking straight ahead, and the other walks r., but turns to face the spectator; to l., Victory in χιτών, advancing r., and crowning emperor.

[Pl. XIV. 9.]

⁹² Cf. Cohen, II. *M. A.*, 584.

⁹³ Neither Cohen nor Eckhel gives this medal for the present year, though both have it for 174; see Cohen, II. *M. A.*, 3; Eckhel, vii. p. 61. The example I describe is in the Berlin collection.

This looks like a triumphal entry into the city. A regular triumph, however, it can in strictness hardly be, since the emperor is on foot. But surely this medal must commemorate an actual *adventus* of the emperor. The details are far too circumstantial, and the background, the triumphal arch and the Capitoline Temple, too definite, to allow of its being a merely symbolical "approach." Here again, therefore, the coins seem to contradict Dio. The statement of this writer is so definite and occurs in such a context that it seems difficult to reject it, and yet it is harder to resist the evidence of the coins. That the emperor did pay a visit, if only a flying visit, to Rome about this time, I am convinced.⁹⁴ It is not easy to fix more closely the date of the visit, for the coins supply no data for classifying the types of this year as earlier or later. Yet in spite of its repetition in 174, I think this medal must be associated with the other coins of the Marcomannic victory. It is worth while to compare it with the type of the emperor crowned by Victory which occurs on gold coins of 172 (see above, Vol. XIII. p. 188). Our present medallion seems to exhibit an elaboration of that type on lines which are quite usual in these cases; it is by no means the first time that we have had a simple type on the coins of one year expanded into a complex type for a commemorative medallion of the next year. It is therefore quite reasonable, and indeed most consistent with the probabilities of the case, to suppose that this return to Rome took place after the completion of the Marcomannic victory, some time during the autumn of 172 or the winter of 172-173. The *Profectio*

⁹⁴ Such is Eckhel's conclusion (see note *ad l.c.*), though he of course dates the *adventus* in 174.

coin of 173 in that case represents a real departure from the city in the spring, in readiness for the campaign of that year. This suits the circumstances in every way far better than to suppose a return to Rome at the close of 173, in the middle of what was practically a single continuous campaign lasting over two years.

To the second year of this fighting I now pass. The coinage of 174 shows an increase in the imperial title, indicating a victorious issue of that year's campaign. The proportions of the coins (at Berlin) struck before and after the change of titulature are as follows :

With IMP. VI.	.	.	.	.	.	20	} 34
With IMP. VII.	.	.	.	.	..	14	

The assumption of the title must, therefore, be placed not much later than the middle of the year. The most notable types which come in with IMP. VII. are as follows :⁹⁵

R. Obv.—M. ANTONINVS AVG. TR. P. XXVIII. Head r., laureate.

Rev.—IMP. VII. COS. III. Victory in χιτών and ἱμάτιον, seated l., with feet on footstool, holding in l. hand palm, in r. hand *patera*.

Æ¹. Obv.—M. ANTONINVS AVG. TR. P. XXVIII. Head r., laureate.

Rev.—IMP. VII. COS. III. Female figure in plumed helmet, short χιτών which leaves r. breast bare, cloak, and boots, standing l., holding in l. hand spear with point downwards, in r. hand Victory.

The Amazonian figure on the second coin is apparently

⁹⁵ Cf. Cohen, II. *M. A.*, 326 *sqq.*

a Roma Victrix. There is nothing very definitive about these types, but there is a coin of the early part of the following year on which we can recognize one of the class of types regularly struck in connexion with a *salutatio*. I borrow it from Cohen : ⁹⁶

N. Obv.—M. ANTONINVS AVG. TR. P. XXIX. Bust r., laureate, loricæ, paludate, with aegis on breast.

Rev.—IMP. VII. COS. III. Victory, nude to waist, seated r. on shields, holding palm, and resting upon l. knee a shield inscribed VIC. AVG.; before her a trophy.

This is a variety of that very frequent type, Victory with an inscribed shield. We have already had types of the same kind, with VIC. AVG. in 164, with VIC. PAR. in 167, with VIC. GER. in 171, in each case associated with a fresh *salutatio*. Clearly it is here issued in connexion with IMP. VII., and it is only by accident that it does not appear till the beginning of 175.⁹⁷

Besides these fresh types appearing with IMP. VII., there are some important types which occur throughout the year. The prevailing one is the Jupiter Victor of last year, of which the Berlin collection has nine specimens for this year, only one of them inscribed IMP. VII. Passing over some less important types continued from 173, we come to a new type, appearing first in the earlier part of the year, and persisting throughout it. At Berlin

⁹⁶ Cohen, *l.c.* 223.

⁹⁷ Note that the occurrence of VIC. AVG. on the coins of the 7th salutatio definitely confirms the attribution of the whole set of types of the "German Victory" to the war concluded in 172.

there are two examples with IMP. VI, and one with IMP. VII. I describe one of the former :⁹⁸

R. Obv.—M. ANTONINVS AVG. TR. P. XXVIII. Head r., laureate.

Rev.—IMP. VI. COS. III. The emperor, togate, standing l., holding sceptre in l. hand, and branch in r. hand. [Pl. XIV. 6.]

The branch is probably laurel, and a sign of victory. The type would then be a sort of abbreviation of the ordinary triumph type, in which the *triumphator* bears such a branch. This is more probable than to suppose the branch to be of olive, comparing the type with that of Hercules Pacifer. The latter type appeared in 164, the year of the "pacification" of Armenia. The parallels already drawn between the Armenian War of 163-164 and the German or Marcomannic War of 170-172 might suggest the appropriateness of such a type. There is, indeed, a type of 173 which might be Pax :⁹⁹

R. Rev.—IMP. VI. COS. III. Female figure with diadem, *χιτών*, and *ἱμάτιον*, standing l., holding sceptre in l. hand and short *caduceus* in r. hand.

But this might equally well represent Felicitas, and as named Pax coins of Marcus normally give not the *caduceus* but the olive branch, I think the present type should be called Felicitas, even though there is a slightly different type for this year, which is certainly Felicitas :¹⁰⁰

R. Rev.—IMP. VII. COS. III. Female figure with diadem, *χιτών*, and *ἱμάτιον*, standing l., holding in l. hand *cornucopiae*, in r. hand long *caduceus*.

⁹⁸ Cf. Cohen, II. *M. A.*, 351, which has IMP. VII.

⁹⁹ Not in Cohen; the type is usually called by Cohen "Pax or Felicitas."

¹⁰⁰ Not in Cohen.

The type of the emperor holding a branch, then, is probably, though not certainly, a victory type. It is supported by other types with a similar reference, which apparently occur only in the earlier part of the year. The first is a Mars Victor, not given in Cohen, which I describe in full from an example at the British Museum, which seems to differ in slight details from the closely similar and similarly inscribed coin given by Cohen for 172:

Æ³. *Obv.*—M. ANTONINVS AVG. TR. P. XXVIII. Head r., laureate.

Rev.—MARTI VICTORI IMP. VI. COS. III. Mars, wearing plumed helmet, *lorica*, and cloak, standing r., holding in l. hand spear, and laying r. hand on shield, which rests upon a captive; the shield is inscribed S. C. [Pl. XIV. 8.]

The next is a new type, which I know only from Cohen: ¹⁰¹

Æ. *Obv.*—M. ANTONINVS AVG. TR. P. XXVIII. Head r., laureate.

Rev.—MARTI VLTORI IMP. VI. COS. III. Mars walking hastily l., holding Victory and trophy.

Unfortunately, Cohen gives no details of the costume worn by this Mars Ultor, but the type appears to be identical with that which in the preceding article,¹⁰² on grounds of general probability, and on the strength of coins of Galba, Vitellius, and Vespasian which first introduce the type, I called Mars Victor. This name, on the other hand, is here applied to a type very similar to that of the resting Mars Ultor, as he is called on the coins of Pius and of Commodus. The present coin

¹⁰¹ Cohen, II. *M. A.*, 430.

¹⁰² Vol. XI. p. 15; cf. pp. 16–18.

differs from the best examples of the resting Mars in two points: (a) the spear does not point downwards, and (b) the shield rests upon an object which, whether it be a captive, or a helmet, or other piece of armour representing the spoils of the enemy, indicates conquest. It is these points of difference alone that justify the name Mars Victor. They are little enough justification, and the name Mars Ultor must still hold the field as the best description of this personage, the present example being an isolated aberration. As for the so-called Mars Ultor of the present year, this case is less unjustifiable. For Mars Ultor is not a mere personification. He is a real person, an individual member of the Pantheon, the patron of the imperial house from the days of Augustus. He may, therefore, be specialized to various functions by means of special attributes, and just as Jupiter Capitolinus becomes Jupiter Victor, so Mars Ultor (= Mars Palatinus) may become Mars Victor. But when all is said, the exchange of names in this year is distinctly a departure, and not a happy departure, from the usage sanctioned by tradition. A third Mars crops up this year to complete the trio, the trophy-bearing Mars whom I have called, on the authority of Albinus and Severus, and by analogy with a type of Pius, Mars Pater.¹⁰³

This list exhausts the types of the present year having a direct bearing on the war, for the *Adventus*¹⁰⁴ and *Profectio*¹⁰⁵ types are evidently only repeated from 173. The question is, whether this marked group of coins celebrating a victory belongs to the victory of 173,

¹⁰³ Vol. XI. pp. 18-22: see Cohen, II. *M. A.*, 254.

¹⁰⁴ Cf. Cohen, II. *M. A.*, 3.

¹⁰⁵ Not in Cohen, but occurring on a gold coin in the British Museum.

commemorated by the Jupiter Victor coin of that year, or to a new victory won during 174 before the conclusive one which closed the campaign and won the seventh salutation. The following considerations seem to me to point to the former solution as the correct one: (i) these types are associated with that of Jupiter Victor, which marked the victory of 173; (ii) the victory of 173 is celebrated by this one type only, unless some one or two of the minor types are to be connected with it; the present group of types would therefore appropriately supplement it; (iii) the short campaign of 174 leaves little room for an incidental victory to be celebrated on the coins before the final victory which occasioned the seventh salutation.

This seventh salutation is by Dio¹⁰⁶ explicitly attached to a victory over the Quadi, the victory with which is associated the story of the "Thundering Legion." This reference has commonly been supposed to date the battle in question to the year 174, on the assumption that the salutation was conferred immediately on the close of the battle. If that be so, then the prominence given to this remarkable victory in the reliefs of the Antonine Column would lead one to expect that it would not pass unnoticed on the coins of the year. But, as a matter of fact, the coinage of 174 shows no recognition of the miracle, for the types associated with IMP. VII. are commonplace enough. Nor can we look for a belated commemoration in the following year, for the change of titulature took place sufficiently early in 174 to allow for the introduction of new types, and, in fact, the coins of 175 do not show anything

¹⁰⁶ *Epit. Dion. Cass.*, lxxi. 10.

fresh which might be associated with the miraculous victory. But a closer consideration of Dio's account of the battle shows that it is hardly likely to have resulted in the critical victory of a decisive campaign. The miracle seems to have served rather to extricate the imperial troops from a tight place, and barely to avert a crushing defeat, than to achieve a really decisive victory. The language of the historian certainly suggests that the seventh salutation followed immediately on the battle, but, in the first place, we cannot trust the verbal form of the epitome in which Dio's work has come down to us, and, in the second place, the custom by which the imperial salutation was given at the close of a campaign, and Marcus' habit of deferring it to the close of a really decisive campaign, make it quite probable that the language of Dio's epitomator is inaccurate, and that the salutation was given at the end of that stage in the fighting, whose turning-point was marked by the miraculous deliverance which changed impending defeat into victory. The victory of the "Thundering Legion," therefore, may quite well be that of 173, if the evidence of the coins seems to suggest this dating. Now there is a very curious type which occurs for the first time on the coins of 173, and persists throughout 174, and then disappears. There are two main forms of the type, a simpler and a more elaborate. I give typical examples from the Berlin collection, in silver, and in the two sizes of bronze: ¹⁰⁷

Æ. *Obv.*—M. ANTONINVS AVG. TR. P. XXVIII. Bust r., laureate and paludate.

¹⁰⁷ Cf. Cohen, II. *M. A.*, 532 *sqq.*; Eckhel, vii. p. 60.

Rev.—RELIG. AVG. IMP. VI. COS. III. Mercury, wearing *petasus*, *chlamys*, and boots, standing r., with head turned l., holding in l. hand *caduceus*, in r. hand *patera*.

Æ². *Obv.*—M. ANTONINVS AVG. TR. P. XXVIII. Head r., radiate (or bust r., radiate, loricæ, and paludate).

Rev.—RELIG. AVG. IMP. VI. COS. III. S. C. Mercury, with *petasus*, *chlamys* hanging from shoulders behind, and winged sandals, standing l., holding in l. hand *caduceus* and in r. hand purse; at his feet l., cock standing l. [Pl. XIV. 10.]

Æ¹. *Obv.*—M. ANTONINVS AVG. TR. P. XXVIII. Head r., laureate (or bust r., laureate and loricæ).

Rev.—IMP. VI. COS. III. (margin) RELIG. AVG. (exergue) S. C. Figure of Mercury as on Æ², standing in a small temple of peculiar construction: it has four columns in the form of terminal figures, and a lunar pediment, and is approached by four steps. The sculptures on the pediment vary slightly, but on the most perfect examples they are as follows, reading from l. to r.: tortoise l.; cock l.; ram l., above which winged cap; *caduceus*; purse.

With one or other of these types there are in the Berlin collection as many as eleven coins for the year 173 and three for 174. Surely there must be some quite special ground for this considerable influx of a new type. Eckhel discusses the question, and suggests several explanations. The one he favours is that Mercury is associated with the emperor's devotions (*Religio Augusti*), because, according to an Egyptian theory, quoted by Diodorus Siculus, i. 16, Hermes was said τὰς τῶν θεῶν τιμὰς καὶ θυσίας διατάξαι. This scarcely carries conviction. Much more plausible is the explanation suggested by his reference to Dio, lxxi. c. 8,

where the miraculous rain-storm in the battle with the Quadi is said to have been the result of the incantations of the emperor's tame magician Arnuphis, who called upon ἄλλους τέ τινας δαίμονας καὶ τὸν Ἑρμῆν τὸν ἄριον. If this was so, nothing could be more natural than to acknowledge the kindness of the god on the coinage. I feel convinced that this is the true explanation of this remarkable type, and that the battle of the "Thundering Legion" is to be dated to the year 173. It might be worth while to look among the coins definitely associated with the victory of this year for any indication that it was won by divine help. The strangely unclassical scene on the Antonine Column, where the barbaric winged figure of Jupiter Pluvius shakes down the rain from his outstretched arms upon the discomfited barbarians, could hardly be expected to find a reflection within the severely conventional limits of numismatic art. But we have seen among the types of 173 a remarkable representation of Jupiter Tonans hurling a thunderbolt at a prostrate barbarian. We are told by Dio¹⁰⁸ (quite apart from the Christian legend interpolated by Xiphilinus) that κεραυνοὶ οὐκ ὀλίγοι and πῦρ ἐκ τοῦ οὐρανοῦ, as well as rain, were included in the performance. It may be, therefore, that this Jupiter Tonans of the coins takes the place of Jupiter Pluvius of the monument, and while this type would not necessarily imply a direct intervention of divine power, any more than does that of Minerva Bellatrix, for example, yet it gains point if we connect it with a miracle attested by the evidence as belonging to the present war, and it serves as one confirmation of the view that

¹⁰⁸ *Epit. Dion. Cass.*, lxxi. 10.

the victory of the "Thundering Legion" took place in 173, that it was not a final, decisive victory, but marked the beginning of the turn of the tide, and that the seventh imperial salutation was given, not immediately upon the battlefield, but after the campaign of 174 had made the subjugation of the Quadi final and complete.

To sum up, then, we have in the years 173-174 a similar phenomenon to that which we have observed in 170-171, practically a continuous two-years' campaign, with incidental victories culminating at last in a new *salutatio*. This two-years' struggle is evidently Dio's πόλεμος μέγας . . . ἐπὶ τοὺς καλομένους Κουάδους.¹⁰⁹ Its official title does not appear. For convenience it may be styled the Quadic War in distinction from the Marcomannic War of 170-172.

The remaining one of the protagonists is the Sarmatian tribe of the Iazyges. We have seen that a campaign against this tribe formed part of the strategy of the Marcomannic War of 170-172, but we can gather from the confused narrative of Dio some hints of the general plan of the operations against the barbarians. In his account of the negotiations with the Quadi,¹¹⁰ he mentions that the result of their submission was to separate the Marcomanni and the Iazyges. If we could trust the order of his narrative, it would appear that the victory over the Quadi was followed by a submissive embassy from the Iazyges,¹¹¹ which was rejected, and that a war ensued, ending in the defeat of the barbarians.¹¹² Then follows an account of the negotiations

¹⁰⁹ *Ept. Dion. Cass.*, lxxi. 8 *ad init.*

¹¹¹ *Ibid.*, 13 *ad init.*

¹¹⁰ *Ibid.*, 11.

¹¹² *Ibid.*, 16.

and of the terms of peace. But the order of the excerpts from Dio which form these chapters is very doubtful, and between the rejection of the Iazygian embassy and the defeat of the Iazyges are inserted a passage recording the rebellion of the Quadi,¹¹³ a digression on Ariogaesus and Tiridates,¹¹⁴ and an excerpt dealing with the Marcomannic settlement,¹¹⁵ while the account of the Iazygian war has dropped out altogether. The chronology of the intervening excerpts is obscure.¹¹⁶ Still it seems clear that, according to the Dionean narrative, the emperor proceeded, after the Quadic victory, against the Iazyges. The evidence of the coins, in agreement with this, attests quite definitely a war against a Sarmatian tribe during the year 175, ending with a fresh salutation. Not only does IMP. VIII. appear during the year, but also two fresh titles, first *Germanicus*, and then *Sarmaticus*. The proportions of coins at Berlin are as follows :

With IMP. VII.	.	.	.	.	.	21	} ³² } 39
With GERM. + IMP. VII.	.	.	.	.	.	11	
With GERM. + IMP. VIII.	.	.	.	.	.	1	
With GERM. SARM. + IMP. VIII.	.	.	.	.	.	6	

¹¹³ *Epit. Dion. Cass.*, lxxi. 13.

¹¹⁴ *Ibid.*, 14.

¹¹⁵ *Ibid.*, 15.

¹¹⁶ If the text be retained in its present order, it would be possible to take c. 13 from *οἱ γὰρ Κουάδοι* as a parenthesis explaining the words *ὑπὸ τῶν Κουάδων ἀπατηθεῖς*, not intended to continue the chronological narrative, but referring back to the beginning of the Quadic war and its causes. The digression in c. 14 is quite natural, and the incident recorded in c. 15 may quite well be in place. The impression produced, if this view of c. 13 be correct, is that the Quadi were throughout the Marcomannic War regarded as "safe," and that the intention was to proceed at once on the conclusion of the *Bellum Germanicum* to the *Bellum Sarmaticum*, but a sudden rebellion of the Quadic "allies" made the war of 173-174 necessary before the main action could proceed. This accords fully with the evidence of the coins, which denominate the victories of 171 and 175 as over "Germans" and "Sarmatians" respectively, while the Quadic victory of 174 is simply *Victoria Augusti*.

The title GERMANICVS is, as we have seen, not actually a new one, but it is during this year that it first appears among the titles on the obverse of the coins. Its appearance may be dated roughly to June, and it is followed about three months later by IMP. VIII., and then almost immediately by SARMATICVS. It would seem as if the German title were introduced merely to prepare the way for the Sarmatic, but another possible reason for its appearance, and a more plausible one, will suggest itself as we proceed.

At all events the new title is clear evidence that the campaign of this year was against the Iazyges. It was concluded late in the year, and coins with IMP. VIII. are not numerous in 175. Still rarer are coins bearing this inscription and a new type. In fact, there is only one fresh type, with which I am acquainted, having any clear bearing upon the course of the war, and this I take from Cohen : ¹¹⁷

R. Obv.—M. ANTONINVS AVG. GERM. SARM. Head r., laureate.

Rev.—SECVRIT. PVB. TR. P. XXIX. IMP. VIII. COS. III.
Securitas seated l., holding sceptre and resting arm on seat.

This is a new variety of the Securitas type which last appeared in 173. No doubt its significance is the same here as in the former case. The repulse of the barbarians has restored the credit and stability of the empire. Cohen gives another type which he doubtfully identifies as Pax,¹¹⁸ and which may, if that identification be the true one, have a reference to the pacification of the last

¹¹⁷ Cohen, II. *M. A.*, 587; Eckhel, vii. p. 62.

¹¹⁸ Cohen, II. *M. A.*, 925.

disturbed area. But the identification is far from certain, and in view of the new and quite different Pax types which appear next year, it is most likely that the present coin represents some other personage, probably Felicitas. It is, in fact, to the coinage of the following year that we must look for the great body of the Sarmatian types. But before passing on to these, there are other types, belonging to the earlier part of the present year, which deserve attention. They have no direct connexion with this year's campaign, for the only victory coins obviously belong to the Quadic war. Besides the VIC. AVG. coin given above, we have only the seated Victory with palm and *patera*,¹¹⁹ Roma Victrix,¹²⁰ and the trophy-bearing Mars (Pater),¹²¹ all of which occur in 174.

The most characteristic types of the first part of the year 175 (say, from December to June) are the following: ¹²²

Æ¹. *Obv.*—M. ANTONINVS AVG. TR. P. XXIX. Head r., laureate.

Rev.—IMP. VII COS. III. S. C. Female figure wearing diadem, *χιτών*, and *ἱμάτιον*, standing l., holding in l. hand *cornucopiæ*, in r. hand two ears; to l., at her feet, *modius*, with poppy-head in the midst of four ears.

Æ². *Obv.*—M. ANTONINVS AVG. TR. P. XXIX. Head r., laureate.

Rev.—ANNOA AVG. IMP. VII. COS. III. S. C. *Modius*, in which poppy-head in the midst of four ears.

The first of these types is described by Cohen as Abundantia. It seems more likely that the second type is

¹¹⁹ Cohen, II. *M. A.*, 923 (but with IMP. VII. at Berlin).

¹²⁰ *Ibid.*, 354 (but with IMP. VII. at Berlin).

¹²¹ *Ibid.*, 314.

¹²² Cf. *ibid.*, 326 (but without GERM. at Berlin), 4.

intended as an abbreviation of the first, and that the figure is to be regarded as a personification of Annona. But the representations of these two figures are closely allied, and in fact hardly discriminated. In any case the prominence of these types seems to indicate some special measures this year in connexion with the administration of the corn supply.¹²³ The following type of the Tiber, which is numerous during these months (the Berlin collection has seven examples), has probably a similar reference: ¹²⁴

Æ². Obv.—M. ANTONINVS AVG. TR. P. XXIX. Head r., laureate.

Rev.—IMP. VII. COS. III (upper margin) S. C. Bearded male figure, nude to waist, reclining l., with l. arm resting on round urn, from which issues water; l. hand holding reed or sapling, r. hand resting on prow, l. in background.

But as these types throw no light upon the chronology of the war, I pass them by. The new type which comes in with the second period of the year, that marked by GERM + IMP. VII. in the legends of the coins (say, June to September), is a more interesting one. I describe a gold coin in the British Museum: ¹²⁵

A. Obv.—M. ANTONINVS AVG. GERM. TR. P. XXIX. Bust r., laureate, loricæ, and paludæ, seen from back.

Rev.—LIBERAL. AVG. VI. IMP. VII. COS. III. Female figure wearing diadem, *χιτών*, and *ἱμάτιον*, standing l., holding in l. hand *cornucopiæ*, in r. hand *abacus*.

¹²³ Such measures are recorded (without date) in *H. A.*, iv. xi. 2-3.

¹²⁴ Cf. Cohen, II. *M. A.*, 348.

¹²⁵ Cf. *ibid.*, 416 sqq.; Eckhel, vii. p. 62.

We have means of identifying and dating the *congiarium* which thus manifested the Liberality of the Emperor for the sixth time. Lampridius, the author of the *Life of Commodus*, informs us that Commodus assumed the *toga virilis* in 175,¹²⁶ and further, that it was on July 7 in that year;¹²⁷ and that in connexion with this ceremony a *congiarium* was distributed, at which Commodus presided *adhuc in praelecta puerili*,¹²⁸ i.e. at Rome, before he left for the *limes*. The date of this *congiarium*, then, is some time in June, 175, and so falls within the period suggested independently by the proportions of the coins.¹²⁹

We are further told by Lampridius that Commodus' assumption of the *toga virilis* took place "*eo tempore quo Cassius a Marco descivit*."¹³⁰ We are prompted therefore to look for indications of the revolt in the coinage. Now among the coins of the earliest months of the year (December to June, roughly) we find the following:¹³¹

Æ². *Obv.*—M. ANTONINVS AVG. TR. P. XXIX. Bust r., laureate, loricæ, and paludate.

Rev.—CONCORD. EXERC. IMP. VII. COS. III. S. C.
Clasped hands, holding standard surmounted by eagle.

¹²⁶ *H. A.*, vii. 12, § 3.

¹²⁷ *H. A.*, vii. 2, § 2.

¹²⁸ *H. A.*, vii. 2, § 1; cf. iv. 22, § 12.

¹²⁹ From this time coins of Commodus become frequent. So great, however, is the obscurity attaching to the early coinage of this emperor that it is scarcely available as independent evidence, and I have preferred to treat it in a separate article, and to use the coinage of Marcus alone as data for the chronology of the Danubian Wars, in order that this chronology may serve as a basis for a study of the coinage of Commodus.

¹³⁰ *H. A.*, vii. 2, § 2; cf. *Epit. Dion. Cass.*, lxxi. 22.

¹³¹ Cf. Cohen, II. *M. A.*, 60, 337; No. 352 has the type of Concordia without the inscription.

Æ¹. *Obv.*—M. ANTONINVS AVG. TR. P. XXIX. Bust r., laureate and loricate.

Rev.—IMP. VII. COS. III. S. C. Female figure in long χιτών, standing l., holding in r. hand short caduceus, in l. hand standard apparently crowned with laurel wreath.

Cohen rightly names the second of these types Fides Militaris. I have already observed that Concordia and Fides are closely associated with times of disturbance and rebellion, and it can hardly remain doubtful that they are here used with reference to the revolt of Avidius Cassius. This revolt, therefore, must have taken place during the first six months of the year, and it was clearly the reason why Commodus was in June summoned to the frontier. May not the outbreak of the revolt also suggest a reason why, about the same time, the title Germanicus begins to appear regularly on the coins? Cassius disparaged Marcus as a soldier, and the emperor may have felt that after all a little self-assertion might be useful. The remaining events of the year, then, fall into the following order. Commodus presided over his *congiarium* in June. On July 7 he assumed the *toga virilis* and was commended to the army. Later, about September, the campaign against the Iazyges came to a close, and the eighth *salutatio* was almost immediately followed by the assumption of the title Sarmaticus. In all probability we should, but for the revolt, have had a two or three years' war, like those against the Marcomanni and the Quadi. The literary authorities are unanimous that the operations were cut short by the outbreak in the east, and that the Iazyges received more favourable terms than would otherwise have been the case.¹³²

¹³² *Epit. Dion. Cass.*, lxxi. 17; *H. A.*, iv. 24, §§ 5, 6; 25, § 1.

After the hasty close of the Sarmatian War follow the emperor's travels in the East, and the settlement of affairs after the rebellion.¹³³ He started, no doubt, in the spring of 176, and there is a coin of this year which might have reference to his journey :

R. Obv.—M. ANTONINVS AVG. GERM. SARM. Head r., laureate.

Rev.—FORT. DVCI TR. P. XXX. IMP. VIII. COS. III.
Female figure wearing diadem, χιτῶν, and ἱμάτιον, seated l., holding in l. hand *cornucopie*, and with r. hand supporting rudder resting on ball; beneath seat, wheel.

Cohen¹³⁴ suspects this coin. I have examined the Berlin example here described, and cannot see why its genuineness should be impugned. The inscription FORTVNAE DVCI occurs on a coin of Commodus¹³⁵ for the year 186, with a complex type which includes a standing figure with a *cornucopie* and a rudder resting on a ball, like the figure of Fortune on the present coin. The idea of Fortune as the emperor's *Dux itineris* is quite a natural one. In the settlement of the revolt the chief emphasis is laid by the historians on the *clementia* of the emperor.¹³⁶ In accordance with this we have the following coin :¹³⁷

Æ¹. Obv.—M. ANTONINVS AVG. GERM. SARMATICVS.
Head r., laureate.

¹³³ *H. A.*, iv. 25-27.

¹³⁴ See Cohen, II. *M. A.*, 203.

¹³⁵ See Eckhel, vii. p. 63. The coin is not in Cohen, but I have noted a specimen at Berlin to which no suspicion appears to attach.

¹³⁶ *H. A.*, iv. 25, §§ 5-8; 26, § 1; vi. 7, § 9; 9, § 4; 10, §§ 2-10; 11, §§ 3-8; 12, §§ 2-10.

¹³⁷ Cf. Cohen, II. *M. A.*, 28; Eckhel, vii. p. 63.

Rev.—CLEMENTIA AVG. TR. P. XXX. IMP. VIII.
(margin) COS. III. (exergue) S. C. Female
figure wearing diadem, *χιτών*, and *ἱμάτιον*,
standing l., holding in l. hand long sceptre,
in r. hand *patera*.

The common type of Aequitas is somewhat unusually numerous in this year ; there are six specimens at Berlin. Aequitas is an own sister to Clementia, and there may be in these coins also some reference to the treatment of the conquered party : I describe one, therefore :¹³⁸

*Æ*¹. *Obv.*—M. ANTONINVS AVG. GERM. SARMATICVS.
Head r., laureate.

Rev.—TR. P. XXX. IMP. VIII. COS. III. S. C. Female
figure wearing diadem, *χιτών*, and *ἱμάτιον*,
standing l., holding in l. hand *cornucopiae*, in
r. hand balance.

During the year 176 appear the hitherto missing coins celebrating the Sarmatian victory. I describe an example in the British Museum :¹³⁹

N. *Obv.*—M. ANTONINVS AVG. GERM. SARM. Bust r.,
laureate, loricæ, and paludæ.

Rev.—TR. P. XXX. IMP. VIII. COS. III. P. P. (margin)
DE SARM. (exergue). Trophy, at foot of
which two captives ; on l. apparently female
figure seated l. with head resting on hand ;
on r. apparently male figure seated r., with
hands behind back.

Simultaneously appears a companion German type, practically identical except for the inscription DE

¹³⁸ Cf. Cohen, II. *M. A.*, 932.

¹³⁹ Cf. *ibid.*, 164.

GERM.¹⁴⁰ The following coin, also in the British Museum, shows a simpler German type :¹⁴¹

N. Obv.—M. ANTONINVS AVG. GERM. SARM. Bust r., laureate, loricæ, and paludate.

Rev.—TR. P. XXX. IMP. VIII. COS. III. P. P. (margin)
DE GERM. (exergue). Pile of arms.

It may be a mere accident that no coins are known bearing the inscription DE SARM. and the simpler type. This series of coins is evidently intended to celebrate not only the Sarmatian (Iazygian) victory, but also the conclusion of the war as a whole. There are other Victory-types with no defining inscription. I take from Cohen the following :¹⁴²

R. Obv.—M. ANTONINVS AVG. GERM. SARM. TR. P. XXX.
Bust r., laureate, loricæ, and paludate.

Rev.—IMP. VIII. COS. III. Victory, seated r. on arms, holding palm, and on knees shield ; before her a trophy.

The type is identical with that issued in connexion with the assumption of IMP. VII. in 174, except that the inscription VIC. AVG. is omitted. This fact makes it probable that the type is not merely repeated, although the form with VIC. AVG. appears in 175 (only in the earlier part, however), but that its issue is associated with the assumption of IMP. VIII. at the close of 175, and that the missing inscription would have been VICtorïa SARmatica. Cohen also gives the following coin :¹⁴³

R. Obv.—M. ANTONINVS AVG. GERM. SARM. TR. P. XXX.
Bust r., laureate, loricæ, and paludate.

¹⁴⁰ Cohen, II. *M. A.*, 161 ; Eckhel, vii. p. 64.

¹⁴¹ Cf. Cohen, II. *M. A.*, 154 ; Eckhel, vii. p. 64.

¹⁴² Cohen, II. *M. A.*, 356.

¹⁴³ *Ibid.*, 357.

Rev.—IMP. VIII. COS. III. The emperor standing r., holding spear, and presenting a figure of Victory to Rome, helmeted, seated on *lorica* and shield, and holding spear.

The type recalls that of Rome and Verus¹⁴⁴ which appeared on coins of 164 (after the Armenian victory) and 167 (after the Parthian victories and the conclusion of the war). Its signification is obvious.

The form of the inscriptions DE GERM. and DE SARM. implies a "*triumphus de Germanis et Sarmatis*." But we know from Lampridius¹⁴⁵ that the triumph did not take place until December 23, 176—that is, in the next tribunician year. These coins, therefore, must have been issued in anticipation, no doubt while the emperor was in the East. His enforced absence delayed the actual triumph, and the triumphal coins served as an *interim* celebration. Closely associated with them, as usually with triumph types, is an issue of coins celebrating the conclusion of peace:¹⁴⁶

Æ². *Obv.*—M. ANTONINVS AVG. GERM. SARM. TR. P. XXX. P. P. Bust r., laureate, loricæ, and paludate, seen from back.

Rev.—IMP. VIII. COS. III. PAX AETERNA AVG. S. C. Female figure wearing diadem, χιτὼν, and ἱμάτιον, standing l., holding in l. hand *cornucopiae*, and in r. hand lowered torch, with which she sets fire to a heap of arms (an indistinguishable mass, among which two shields can be recognized in the best examples).

The *Bellum Germanicum et Sarmaticum*, then, is ended, and Eternal Peace reigns throughout the world.

¹⁴⁴ See Vol. XI. p. 26, and Cohen, II. *L. Verus*, 181.

¹⁴⁵ *H. A.*, vii. 12, § 5.

¹⁴⁶ Cohen, II. *M. A.*, 360. I describe the type from coins of the following year at Berlin; I have not seen it for the present year.

The emperor's return is commemorated in the coinage of the thirty-first tribunician year (December 10, 176–December 9, 177) by a large issue of the following type:¹⁴⁷

Æ². *Obv.*—M. ANTONINVS AVG. GERM. SARM. TR. P.
XXXI. Head r, laureate.

Rev.—IMP. VIII. COS. III. (margin) FELICITATI AVG.
P. P. (*supra*) S. C. (*infra*). Galley, with
rowers and steersman, travelling over waves
l.; on prow figure standing l., holding in l.
hand standard. [The number of rowers
varies, and still more the number of oars;
sometimes the figure on the prow is replaced
by one standing at the stern, holding a spear
or a trident.]

The Berlin collection has twelve coins of this description for the present year. The type is practically a repetition of that which appears on the coins of Verus for 163, with the legend FELIC. AVG.¹⁴⁸ As those coins celebrated the safe voyage of Verus to Syria, so the present issue records Marcus' safe return to Italy. It gains point from the statement of the *Life* that on this voyage the emperor went through a dangerous storm.¹⁴⁹ The return to Italy, then, may be dated very late in 176. It was closely followed by the triumph,¹⁵⁰ which is fixed by the *Life of Commodus* to December 23, 176—that is, within the first fortnight of the present tribunician year. It gives rise to a large issue of coins bearing the two types of the trophy and captives and the pile of arms,

¹⁴⁷ Cf. Cohen, II. *M. A.*, 188 *sqq.*; Eckhel, vii. p. 64.

¹⁴⁸ See Vol. XI. p. 7, and Cohen, II. *L. Verus*, 69–84.

¹⁴⁹ *H. A.*, iv. 27, § 2.

¹⁵⁰ *H. A.*, iv. 27, § 3. "*Romam ut venit, triumphavit.*" the inscription on the triumphal arch is extant; see *C. I. L.*, vi. 1014.

as described above, or with slight variations, and the inscriptions DE GERMANIS and DE SARMATIS, or abbreviations of these inscriptions.¹⁵¹ It will be unnecessary to describe these coins in full. The Berlin collection has in all sixteen of them. But there are even more explicit triumph types. Cohen gives a large bronze medallion as follows : ¹⁵²

Obv.—M. ANTONINVS AVG. GERM. SARM. TR. P. XXXI.
Bust l., laureate, loricate, with aegis and sceptre.

Rev.—IMP. VIII. COS. III. P. P. Marcus and Commodus in *quadriga* stepping l., each holding sceptre surmounted by eagle; Marcus also holds laurel-branch; *quadriga* is conducted by a man on foot, and above a Victory hovers.

This is practically a reproduction of the medal of 167 which celebrated the Armenian and Parthian triumph of Marcus and Verus. A similar type appears on bronze coins of the first denomination : ¹⁵³

Obv.—M. ANTONINVS AVG. GERM. SARM. TR. P. XXXI.
Bust r., laureate and paludate.

Rev.—IMP. VIII. COS. III. P. P. (margin) DE GERMA.
(exergue) S. C. Marcus and Commodus in *quadriga* stepping l.

Here the exergual inscription defines closely the occasion of the triumph: it is "*triumphus de Germanis*." It is, perhaps, an accident that none of these coins are

¹⁵¹ Cohen, II. *M. A.*, 155-161, 167-176. The Berlin collection has coins with DE GERMANIS parallel to No. 174, DE SARMATIS.

¹⁵² Cohen, II. *M. A.*, 367; Eckhel, vii. p. 64.

¹⁵³ Cohen, II. *M. A.*, 162.

known with DE SARM. On the silver coins appears what is clearly an abbreviation of the full triumph type:¹⁵⁴

Obv.—M. ANTONINVS AVG. GERM. SARM. Head r., laureate.

Rev.—TR. P. XXXI. IMP. VIII. COS. III. P. P. The emperor seated l. on curule chair, with feet on footstool, holding in r. hand branch, in l. hand sceptre.

The branch is no doubt of laurel, the badge of the *triumphator*. It is natural to connect with the triumph the re-issue of the types closely associated with the late campaigns—Jupiter Victor,¹⁵⁵ Roma Victrix,¹⁵⁶ and Victory with palm and wreath,¹⁵⁷ though it is possible that this last may have another reference. Finally the Pax Aeterna of last year is repeated,¹⁵⁸ along with two fresh types of similar intention. The first is merely the type of Pax Aeterna with a shortened inscription, and is used on silver coins. The following example is at Berlin:¹⁵⁹

R. Obv.—M. ANTONINVS AVG. GERM. SARM. Head r., laureate.

Rev.—TR. P. XXXI. IMP. VIII. COS. III. P. P. (margin) PAX AVG. (exergue). Female figure wearing diadem, χιτών, and ἱμάτιον, standing l., holding in l. hand *cornucopiæ*, in r. hand lowered torch, with which she fires heap of arms.

¹⁵⁴ Cf. Cohen, II. *M. A.*, 950.

¹⁵⁵ *Ibid.*, 942.

¹⁵⁶ *Ibid.*, 952.

¹⁵⁷ *Ibid.*, 949.

¹⁵⁸ Not in Cohen, but common at Berlin.

¹⁵⁹ Not in Cohen.

The other is of different form. I describe it after Cohen:¹⁶⁰

R. Obv.—M. ANTONINVS AVG. GERM. SARM. Head r., laureate.

Rev.—TR. P. XXXI. IMP. VIII. COS. III. (margin) PAX (exergue). Pax standing l., holding olive-branch and *cornucopie*.

But the Eternal Peace was fated soon to be broken, for at the very end of 177 a new salutation appears on

¹⁶⁰ Cohen, II. *M. A.*, 936. There are a few other types which must not be passed over in silence. The following coin at Berlin probably represents *Fides Exercituum* (cf. Cohen, II. *M. A.*, 945):

R. Obv.—M. ANTONINVS AVG. GERM. SARM. Head r., laureate.

Rev.—TR. P. XXXI. IMP. VIII. COS. III. P. P. Female figure in diadem and *diplous* standing l., holding in l. hand globe, in r. hand standard.

It may have been issued among the triumph coins by way of recalling the suppression of the Cassian revolt. More likely, however, it is a record of some fresh menace of disloyalty, the occasion of which is unknown to us. When these *Fides* types appeared in 171 we found that there was evidence of trouble in the African provinces, with which the appeal to the soldiers' loyalty might conceivably be connected. It is possible that about this period the Mauri were in insurrection, and it is just possible that our *Fides* type has reference to the menace of disloyalty in those regions. *C. I. L.*, ii. 1120, 2015, in honour of C. Vallius Maximianus, *legatus Augustorum duorum* (Marcus and Commodus), allude to an invasion of Baetica and a Mauretanian war: "*Provincia Baeticam caesis hostibus paci pristinae restituit*" . . . "*Municipium drutina obsidione et bello Maurorum [liberavit]*." Hübner (*C. I. L.*, l.c.) takes the *Augusti duo* to be Marcus and Verus. But Capitolinus (*H. A.*, iv. xxii. 1) narrates these events among those succeeding the death of Verus. If any stress is to be laid upon his order, the troubles cannot be dated before 178, when again there were two Augusti. If, however, this Moorish invasion is identical with that which occurred during the quaestorship of Severus (*H. A.*, x. ii. 4) it must be put earlier, since Severus was praetor designate in 178.

Cohen gives the name of *Fides* also to his type (No. 943) of a female figure with two corn-ears and a basket of fruit. It belongs rather to the *Abundantia* family. Finally there is a fairly numerous issue of coins inscribed *LIBERALITAS AVG. VII.*, and bearing the usual types of Liberality with *cornucopie* and *abacus*, and the *Congiarium* scene. I shall consider this *Congiarium* in dealing with the contemporary coins of Commodus.

the coins, testifying to a renewed outbreak of war in the later months of this year. The proportions of coins at Berlin are as follows :

With IMP. VIII.	52	} 59
With IMP. VIII.	7	

But some allowance must be made for the unusually large issues of special types at the beginning of the year in connexion with the emperor's return and the triumph. A large bronze coin at Berlin exhibits an interesting new type accompanying IMP. VIII. :

Æ¹. *Obv.*—M. ANTONINVS AVG. GERM. SARM. TR. P. XXXI.
Bust r., laureate.

Rev.—PROPVGNATORI IMP. VIII. COS. III. P. P. S. C.
Jupiter, nude, standing r., extending l. hand,
and with r. hand brandishing *fulmen*; at his
feet r. a small figure lying on ground r., lean-
ing on l. elbow, and slightly raising r. arm,
as in supplication. [Pl. XIV. 11.]

This type is a more purely symbolic one than the Jupiter Tonans in combat of 173; it presents the same idea reduced to its simplest terms. In form it is not unlike the Jupiter Defensor Salutis Aug. of the coins of Commodus' sixteenth tribunician year.¹⁶¹ A certain amount of suspicion, however, attaches to this coin. Cohen gives a similar example,¹⁶² which he thinks "*bizarre*" and "*particulier*." About the Berlin specimen, too, the curators feel some doubt, though its appearance certainly does not merit the epithets employed by Cohen. The British Museum does not possess an example of this type. One would look for a Jupiter type of some kind this

¹⁶¹ See Cohen, III. *Comm.*

¹⁶² Cohen, II. *M. A.*, 504; cf. Eckhel, vii. p. 64.

year, in view of the type which, although not given by Cohen, occurs on comparatively numerous middle bronze coins at Berlin, and to which, so far as I know, no doubt attaches :

Æ². *Obv.*—M. ANTONINVS AVG. GERM. SARM. TR. P. XXXI.
Head r., radiate.

Rev.—IMP. VIII. COS. III. P. P. S. C. Winged
fulmen, upright. [Pl. XIV. 12.]

The *fulmen* appeared in association with types of Jupiter Tonans and Jupiter Victor in 173. In itself, however, it may be merely a symbol of power, as when it appears as an attribute of the emperor in a victory type of 172. There is no other coin giving any help towards identifying the victory of 177. Nor are things much better if we turn to the next year. The main types here are those of Minerva Pacifera with an olive branch,¹⁶³ and of the resting Mars Ultor,¹⁶⁴ types which denote rather a settlement than the outbreak of a war. The Roma Victrix¹⁶⁵ which accompanies them is repeated from the preceding year, and in fact has been constant practically since 172. The vague type of Victory with palm and wreath¹⁶⁶ appeared in the early part of 177, but it may all the same be associated with the fighting which won

¹⁶³ Cohen, II. *M. A.*, 955. This type appears very early in the year. According to Cohen it is one of the very few types of 178 which appear with the inscription GERM. SARM. I have not seen any coins of 178 with this inscription; it must have disappeared very early in the year. Is it possible to trace in the omission the emperor's sense of disappointment at this renewal of the war? He had assumed the titles in honour of a finished conquest, and when resistance again broke out he felt that his task was still incomplete, and dropped the honorific titles.

¹⁶⁴ Cohen, II. *M. A.*, 953 (the spear is quite clearly reversed on the examples I have seen at Berlin).

¹⁶⁵ *Ibid.*, 960.

¹⁶⁶ *Ibid.*, 372.

the ninth salutation. In any case it gives us no help towards identifying the present victory, which is indeed a very puzzling one. Unless this indefinite Victory coin be connected with the campaign in question, there seems to be no hint of fighting before the appearance of the salutation which marks its successful close. There is indeed a type similar to that of the *Profectio Augusti*, which I describe after Cohen :¹⁶⁷

R. Obv.—M. ANTONINVS AVG. GERM. SARM. TR. P. XXXI.
Bust r., laureate, loricate, paludate.

Rev.—IMP. VIII. COS. III. P. P. The emperor on horseback, raising r. hand.

It seems impossible, however, to make this coin refer to a departure of the emperor from Rome for this campaign, for the *Life of Commodus*¹⁶⁸ dates the *profectio* for the last war to 178. This is confirmed by an issue of coins of the following type :¹⁶⁹

*Æ*¹. *Obv.*—M. ANTONINVS AVG. GERM. SARM. TR. P. XXXI.
Head r., laureate.

Rev.—VOTA PVBLICA IMP. VIIII. COS. III. P. P. S. C.
The emperor, togate, with *cinctus Gabinus*, standing l., holding in l. hand scroll, in r. hand *patera* over flaming tripod.

Coins of this type appear to occur only with IMP. VIIII.¹⁷⁰ The type of *Vota Publica* appeared last in 167, preceding the *Profectio* for the *expeditio Germanica* of the autumn of that year. In this case, too, one would expect it to

¹⁶⁷ Cohen, II. *M. A.*, 360.

¹⁶⁸ *H. A.*, vii. 12, § 6.

¹⁶⁹ Cohen, II. *M. A.*, 1026.

¹⁷⁰ In my notes of the Berlin collection I have a coin of this type inscribed IMP. VIII. Cohen, however, gives it only with IMP. VIIII., and the Berlin curators agree in the reading, so it is probably an error on my part.

have been struck before the emperor left Rome, to commemorate the vows taken in preparation for his *Profectio*. Here, as in the former case, there is a special reference in the literary authorities¹⁷¹ to the religious rites which preceded the emperor's departure for the front. These coins, therefore, thoroughly confirm the statements of the historians about the date of this last *Profectio*, and make it all the more impossible to find in the type of the emperor on horseback an allusion to a *Profectio* before the closing months of 177. The coin might be taken in connexion with the question raised on the types of 173, as suggesting that a *Profectio* on the coins is not necessarily an actual departure of the emperor from Rome, but merely the opening of a war. But the present coin is probably not a *Profectio* after all. Compare the following coin of Commodus :¹⁷²

A. Obv.—COMMODO CAES. AVG. FIL. GERM. SARM.
Youthful bust r., loricate and paludate.

Rev.—ADVENTVS CAES. Commodus on horseback r.,
raising r. hand.

I shall show, in considering the coinage of Commodus, that this coin probably belongs to the latter part of 176, and commemorates the return from the East which on coins of Marcus is celebrated by the *Felicitas* coins of the early part of 177. The type now under consideration seems clearly to be identical with that on the coin of Commodus, and represents *Adventus Augusti*. We may take it therefore that the present coin was issued in association with the *Felicitas* coins. They celebrate

¹⁷¹ *Epit. Dion. Cass.*, lxxi. 33.

¹⁷² See Cohen, II., *Comm.*, 1-2.

the safe voyage of the emperor from the East to Italy, and this coin celebrates his entry into the city.¹⁷³

But we are no nearer an identification of the victory of 177. The discussion, however, has served to suggest a parallel with the opening of the *expeditio Germanica* of 167-169. In this case, as in that, the victory which occasioned the *salutatio* must have been won in the absence of the emperor by one of his generals in the provinces. The literary authorities imply that the victory of 175 was very incomplete, and that fighting continued in spite of the conclusion of peace. Dio ¹⁷⁴ in fact traces the outbreak of the last war to the non-success of efforts made by the Quintilii to "bring the war to a close" (τὸν πόλεμον παῦσαι). It may be that the victory of the present year is one gained by these Quintilii. Their failure finally to crush the resistance need not rule out of the question an incidental victory of sufficient importance to justify the assumption of IMP VIII., for they were, says Dio, men of considerable ability, courage, and experience.¹⁷⁵ Conjecturally, therefore, this Victory may be identified as one gained by these provincial governors against the barbarians, while the emperor was at Rome. I lay no stress, however, on this particular identification. In all probability there was other fighting during the year in the Danube region, and others besides the Quintilii may have won some incidental success.¹⁷⁶

¹⁷³ This is the return recorded by Dio (lxxi. 32) when he says that Marcus had been absent eight years. The coins have shown that he was probably in Rome at least once during that time, in 172. Perhaps the meaning is that now after eight years of almost continuous absence the emperor was returning to settle at home in peace. Such seems to have been his intention, but the renewal of the war prevented it.

¹⁷⁴ *Ept. Dion. Cass.*, lxxi. 33.

¹⁷⁵ *L.c.* φρόνημα καὶ ἀνδρίαν ἐμπειρίαν τε πολλὴν ἔχοντες.

¹⁷⁶ An inscription (*C. I. L.*, vi. 1599) records that M. Bassaeus Rufus,

The coins at any rate make it clear that a victory was won late in the year in the absence of the emperor. They suggest that the outbreak was unexpected, for there is no clear trace of it at all until the issue of the coins of the ninth salutation; and so far they confirm the impression derived from Dio that the determination of the emperor to go to the front again in person was a sudden one, due to unexpected disquieting news from the provinces.

The victory of 177 introduces the last of the Danubian wars, which properly begins with the *Profectio* of the emperors¹⁷⁷ on August 5, 178. It is called by Dio τὰ Σκυθικὰ,¹⁷⁸ and by Lampridius "*bellum Germanicum*,"¹⁷⁹ while Capitolinus describes it more precisely as a three-years' war against the Marcomanni, Hermunduri, Sarmatae, and Quadi.¹⁸⁰ Its official title in inscriptions is normally "*expeditio Germanicæ secum̄t*,"¹⁸¹ as

praefectus praetorio, was rewarded "*ob victoriam Germanicam et Sarmaticam Antonini et Commodi Augg.*" Bassaeus Rufus is mentioned as ἑπαρχος in the German War by Dio (lxxi. 5, ἐν τῷ πολέμῳ τοῦ Μάρκου τῷ πρὸς τοὺς Γερμανοὺς). This victory, however, cannot be in the earlier war, because Commodus is Augustus. It might be thought that the victory of this inscription is the one which gained IMP. VIII. But, as I shall try to show in dealing with the coinage of Commodus for these years, that prince was not Augustus until 178. The victory of the inscription, therefore, would seem to be some unknown one in 178 or 179. The phrase "*Germanicam et Sarmaticam*" is curious; it ought to belong to the "*Bellum Germanicum et Sarmaticum*."

¹⁷⁷ For Commodus was raised to the full rank of Augustus some time during 178. Probably his marriage with Crispina took place at the same time, and this is to be dated shortly before the *Profectio*. See my essay on the Coinage of Commodus during the Reign of Marcus.

¹⁷⁸ *Epit. Dion. Cass.*, lxxi. 33.

¹⁷⁹ *H. A.*, vii. 2, § 5.

¹⁸⁰ *H. A.*, iv. 27, § 10. "*Triennis bellum postea cum Marcomannis, Hermunduris, Sarmatis, Quadis etiam egit, et, si anno uno superfuisset, provincias ex his fecisset.*" The *triennium* must be counted from the renewal of hostilities in 177 to Marcus' death in March, 180.

¹⁸¹ See, e.g., *C. I. L.*, ii. 4114, where Tiberius Claudius Candidus is

contrasted presumably with the "*expeditio Germanica*" of 167-169. The two wars are at any rate parallel in the paucity of the coinage. The falling off in the number of extant coins from the middle years of the reign is most marked,¹⁸² and the falling off in interest no less so. For 178 there is no single type indicating any fresh phase of the war.¹⁸³ Even the *Profectio* of the emperors leaves no trace on the coinage. There is no new salutation, and unless we place the victory of Bassaeus Rufus in this year, there is no evidence that anything at all was done.

The coinage of 179 is the smallest for the whole reign. The Berlin collection contains only ten specimens. Of these eight bear the inscription IMP. X. The fighting, therefore, resulted quite early in the year in a victory. The characteristic type with the new inscription is as follows:

R. *Obv.*—M. AVREL. ANTONINVS AVG. Bust r., laureate and loricate.

"*propositus copiarum expeditionis Germanicae secundae*;" also *C. I. L.*, x. 408. Sometimes, however, it is styled "*expeditio Sarmatica*," as in *C. I. L.*, x. 408, where Bruttius Praesens, father of Crispina Augusta, is "*comes imp[er]i. Ant[onini] et Commodi Augg.] expeditionis Sarmaticae*;" and sometimes apparently "*bellum Germanicum et Sarmaticum*," if the inscription of Bassaeus Rufus quoted above really refers to the present war.

¹⁸² That a financial crisis followed the exhaustion of the German War is clear. Dio, lxxi. 32, records an extraordinary remission of debts to the *fiscus* and *αειραιῶν*: τοῖς ὀφειλουσὶ τι τῷ βασιλικῷ καὶ τῷ δημοσίῳ πᾶσι πάντα τὰ ὀφειλόμενα ἀφῆκεν. Cassiodorus dates the remissions to 178 (Ed. Migne, vol. lxxix. p. 1234). Orosius (vii. 15) describes the burning of the records of public debts.

¹⁸³ Minerva Pacifera and Mars Ultor I have taken to belong to the victory of 177, and Pax goes with them: see Cohen, II. *M. A.*, 955, 953, 371. Cohen gives a coin of Virtus Aug. with the inscription IMP. X. (*Ibid.*, 1002), but this is clearly an error.

Rev.—TR. P. XXXIII. IMP. X. COS. III. P. P. Victory, wearing *χιτών*, advancing l., with feet on globe, holding in r. hand wreath, in l. hand palm.

Cohen¹⁸⁴ gives a variant in which a trophy takes the place of the palm. The other types are mostly old ones, the resting Mars Ultor and Felicitas being the most prominent. Cohen gives two more types as occurring first with IMP. X. The first is a Fortuna Redux:¹⁸⁵

R. Obv.—M. AVREL. ANTONINVS AVG. Head r., laureate.

Rev.—TR. P. XXXIII. IMP. X. COS. III. P. P. Fortune seated l., holding rudder and *cornucopiae*; beneath her seat, a wheel.

This type has recurred twice since its appearance in the second year of the "*expeditio Germanica*," 168. With slight variations it occurs in 169–170,¹⁸⁶ and in 176.¹⁸⁷ In each case I think its reference is to a "return of good fortune" in the war. A reference to the emperor's return would be possible in 176, but impossible in 169, and impossible again here, for in each case the coins in question follow more or less closely on a *projectio* of the emperor, at a time when a return could hardly be thought of. The other new type has no apparent relation to the war:¹⁸⁸

R. Obv.—M. AVREL. ANTONINVS AVG. Head r., laureate.

Rev.—IVSTITIA AVG. TR. P. XXXIII. IMP. X. COS. III. P. P. Justice seated l., holding *patera* and sceptre.

There may be a reference to the humane legislation which had been effected during the emperor's stay in

¹⁸⁴ Cohen, II. *M. A.*, 969.

¹⁸⁶ *Ibid.*, 204–207.

¹⁸⁵ *Ibid.*, 967.

¹⁸⁷ *Ibid.*, 210.

¹⁸⁸ *Ibid.*, 385.

Rome. The S. C. Orfitianum, his most celebrated reform in the region of private law, is dated to 178 (*Dig.*, XXXVIII. xvii. 1). Cassiodorus (ed. Migne, vol. lxix. p. 1234) mentions Marcus' legal reforms under the same year, and Orosius (vii. 15) couples them with the remissions of debts in that year. There is no coin of the earlier part of this year worthy of mention, unless a genuine coin underlies the following description in Cohen : ¹⁸⁹

Æ¹. *Obv.*—M. AVREL. ANTONINVS AVG. TR. P. XXXIII.
Head r., laureate.

Rev.—FIDES EXERCITVVM IMP. VIII. COS. III. P. P.
S. C. *Fides militaris* standing l., holding
Victory and legionary eagle.

As it stands the inscription is impossible. Very likely, however, the IMP. VIII. is a mere error. A practically identical type occurs next year with no descriptive legend, but with a correct inscription. What the reference may be I cannot say. Did the growing weakness of the elder emperor and the comparative inefficiency of the youthful heir give rise to some conspiracy which has not been recorded—perhaps in favour of Claudius Pompeianus, the husband of Lucilla, or his son, who with his stepmother was implicated in the first conspiracy of the succeeding reign? If so, an appeal to the Loyalty of the Troops would be in place.

The victory of the early months of 179 is identified directly by the statement of Dio ¹⁹⁰ that the tenth

¹⁸⁹ Cohen, II. *M. A.*, 202.

¹⁹⁰ *Epit. Dion. Cass.*, lxxi. 33 *ad fin.* Καὶ τῷ Πατέρνῳ δοὺς χεῖρα μεγάλην, ἐπεμψεν αὐτὸν εἰς τὸν τῆς μάχης ἀγῶνα. Καὶ οἱ βάρβαροι ἀντέτειναν μὲν διὰ τῆς ἡμέρας ἀπάσης, κατεκόπησαν δὲ ὑπὸ τῶν Ῥωμαίων πάντες. Καὶ ὁ Μάρκος τὸ δέκατον αὐτοκράτωρ προσηγορεύθη. Καὶ εἴγε πλέον ἐβεβίωκει,

salutatio followed a great victory won after a whole day's fighting by Tarrutenius Paternus, the pretorian prefect. The narrative passes on at once to the death of Marcus. This may be due only to the work of the epitomator. In any case Marcus lived till the next year. He died on March 17, 180, p. C.

The coinage of the last three months is naturally not very numerous, though proportionately it is fuller than that of the preceding year. The following is a new type so far as the coinage of Marcus is concerned. There are three examples at Berlin, out of a total for the year of twelve :¹⁹¹

Æ¹. *Obv.*—M. AVREL. ANTONINVS AVG. TR. P. XXXIIII.
Bust r., laureate and loricæ.

Rev.—VIRTVS AVG. IMP. X. COS. III. P. P. S. C.
Female figure, wearing helmet, short tunic, and boots, seated l., holding in l. hand *parazonium*, in r. hand spear with point downwards.

The Valour of the Emperor was celebrated previously on the coin of 172, after the first victory of the *bellum Germanicum et Sarmaticum*. Here the reversed spear associates the type with the "pacific" group of types. The Valour of the Emperor rests after the achieved victory. Another factor in the success was the Loyalty of the Troops, and this is celebrated on a coin bearing (probably) the types of Fides with Victory and standard, without explanatory legend.¹⁹²

πάντα τὰ ἐκεῖ ἂν ἐκεχειρώτο· νῦν δὲ τῇ ἑπτακαιδεκάτῃ τοῦ Μαρτίου μετήλλαξεν.

¹⁹¹ Cf. Cohen, II. *M. A.*, 1003. This is probably the coin which is intended in the erroneous description 1002, with TR. P. XXXII.

¹⁹² Cohen, II. *M. A.*, 973. Cohen, for some unknown reason, calls the type Concordia Militaris. It is identical with the type of Fides in 179 and 171. Like them it may refer to some unknown treason.

The following large bronze medallion is peculiar: ¹⁹³

Obv.—M. AVREL. ANTONINVS AVG. GERM. SARM. TR.
P. XXXIIII. Bust r., laureate and loricate.

Rev.—IMP. X. COS. III. P. P. Bearded male figure, nude to waist, with flowing robe over lower limbs, reclining l. with l. elbow on round vessel lying on its side, from which issues water; and with r. hand resting on prow; above, to r., curved line, perhaps representing cave.

The type is closely similar to the ordinary Tiber type, which appears, for example, in 175. The trouble is caused by the curious curved object which spans the reclining figure. Cohen calls it, though doubtfully, the arch of a bridge. If this were possible the type would be more likely to be Danube than Tiber, the bridge being associated with the conquest. But I feel certain it is not a bridge. The coin of 172 inscribed VIRTVS AVG. shows how differently a bridge appears in Roman numismatic art, and this corresponds closely with other representations, as on the column of Trajan. More probably the curved object represents a cave, as it appears in the types of the Wolf and Twins, of Hercules and Cacus, and the like,¹⁹⁴ and the type has reference simply to the Ostian corn-trade, as in the case of the Tiber coin of 175. But why, in this case, the river should be represented as issuing from a cave it is not quite easy to say.

Our study of the war is brought to a close by the death of Marcus on March 17 of this year. The war

¹⁹³ Cf. Cohen, II. *M. A.*, 383.

¹⁹⁴ There is some discussion of bridges and caves in numismatic art in Prof. van Buren's article on "A Medallion of Antoninus Pius" in *J. R. S.*, vol. i. pt. 2, pp. 187 *sqq.*

itself was not finished, and its last stage will appear again in the coinage of the first year of Commodus. It will be well to sum up briefly the general view of the operations on the Danube that we have arrived at. The pressure of the barbarians on the frontier became irresistible about the middle of 166. The Parthian war was but just over, but the case was urgent, and with such troops as were at their immediate disposal the emperors advanced against the invaders. The barbarians, never at this date capable of prolonged offensive operations, soon retired. The emperors advanced across the Alps, secured the most vulnerable positions against a repetition of the invasion, and returned to Rome to raise troops and make preparations for the war of conquest. Verus died, and his removal was probably no hindrance to the survivor in the prosecution of the war. After the preparations of 169 were complete, Marcus proceeded to a systematic series of campaigns designed to end in the annexation of the territories of the Marcomanni and Iazyges. It is not asserted that the Quadi were included in the scheme of conquest. The projected provinces mentioned are Marcomannia and Sarmatia.¹⁹⁵ Accordingly, the first blow fell on the Marcomanni, the most formidable of the aggressors, a side attack on the Iazyges preventing them from assisting their allies. Three years of hard fighting reduced the Marcomanni to subjection. But in the moment of victory came a rebellion of the Quadi, hitherto regarded, by virtue of their hostility to the Marcomanni, as "safe."¹⁹⁶ Two more years' fighting

¹⁹⁵ *H. A.*, iv. 24, § 5. The Quadi were old "clients" of Rome; cf. the coin of Pius with REX QVADIS DATVS.

¹⁹⁶ *Epit. Dion. Cass.*, lxxi. 33. I regard the passage οἱ γὰρ Κουάδοι . . . ἀνεβέβησαν as a digression, explaining how the Quadi had originally

reduced them to submission; they asked for terms, and were granted, it appears, tolerable conditions, "in order that they might be detached from the Marcomanni."¹⁹⁷ The emperor was now free to proceed against the Iazyges. But in the midst of his first campaign he was interrupted by the news of Cassius' revolt in the East. Granting comparatively easy terms to the Sarmatians, he hastily left the Danube for the East. The result of this interruption was that the great aim of the war remained unfulfilled. The barbarians had only been reduced to submission, and not completely subjugated. In consequence they were able to renew hostilities, and after unsuccessful attempts on the part of the imperial generals to put an end to their aggressions, Marcus determined to make another vigorous effort to accomplish his purpose. He left Rome again, won an important victory, and was about to complete the conquest when he died, leaving his unfinished task to his son and successor.

In conclusion, I will exhibit the results of the inquiry in tabular form.

I. *First War*, EXPEDITIO GERMANICA, 166-169.

166, about midsummer

or later Barbarian inroads.

166, later Sack of Opitergium, siege of
Aquileia, &c.

broken faith with the emperor, and caused him to be distrustful of barbarian overtures: see note 116.

¹⁹⁷ *Ept. Dion. Cass.*, lxxi. 12. The tone throughout suggests that the Quadi are rigidly distinguished from the Marcomanni and Iazyges. The latter are the enemies of Rome, to be resisted to the bitter end. The Quadi are normally and naturally the enemies of Rome's enemies, and capable of much useful service in keeping them in check. Thus, in spite of their fickleness, they are treated as the "most favoured nation."

- 167, April Victory over the barbarians (won by legates, possibly by Vindex and Candidus, the emperors being still at Rome).
- 167, about October . . *Profectio Augustorum*: they reach Aquileia; the barbarians retire.
- 167-168, winter . . . The emperors winter at Aquileia; the barbarians send in their submission.
- 168, about February . The title IMP. V. officially adopted in token of the submission of the enemy.
- 168, summer The emperors cross the Alps; settlement of the Danube provinces.
- 168-169, winter . . . The emperors winter at Aquileia.
- 169, January The emperors start for Rome; death of Verus; Marcus returns to the city.

II. *Second War*, BELLUM GERMANICUM ET SARMATICUM, 169-175.

- 169, autumn *Profectio Augusti*.

170-172, BELLUM GERMANICUM SIVE MARCOMANNICUM.

- 170 Inconclusive campaign against Marcomanni, with incidental victory.
- 171 Fighting continued, ending in complete victory; salutation IMP VI.
- 172 Pacification of Marcomannia.
- 172, autumn *Adventus Augusti* (probable).

173-174, *Quadic War*.

- 173, spring *Profectio Augusti* (probable).
- 173, summer Campaign against Quadi; victory of the "Thundering Legion"; result indecisive.
- 174, about June . . . Fighting issues in decisive victory; salutation IMP. VII.

175, BELLUM SARMATICUM.

- 175, about April . . . News of Cassian revolt reaches the Danube.
 175, July Commodus receives the *toga virilis* on the frontier.
 175, autumn Victory over the Iazyges; conclusion of peace; intended pacification of Sarmatia deferred by necessity of expedition to the East.

III. *Interlude: The Cassian Revolt and Succeeding Events, 175-177.*

- 175, spring Outbreak of the Revolt.
 176 The emperor's tour in the East, and settlement of the disturbed provinces.
 176, autumn The emperor's return from the East.
 176, December . . . *Triumphus de Germanis et Sarmatis*.
 177 Renewed fighting on the Danube.
 177, late autumn . . Victory (? of the Quintilii) over the barbarians on the Danube: salutation IMP. VIII. ; Marcus and Commodus decide to go to the front; public vows for their safety.

IV. *The Third War, EXPEDITIO GERMANICA SECUNDA, 178-180.*

- 178, August *Profectio Augustorum*.
 179, spring Victory of Tarrutenius Paternus; salutation IMP. X.
 179-180 Further operations preliminary to pacification and annexation of territory.
 180, March 17 Death of Marcus.

KEY TO PLATE XIV.

1. A. London. Tr. P. XXVI. Imp. VI. Cos. III. See p. 188.
2. Æ¹. Berlin. Tr. P. XXVI. Imp. VI. Cos. III. See p. 187.
3. Æ¹. London. Tr. P. XXV. Concordia Exercituum Cos. III. See p. 196.
4. Æ¹. Berlin. Germanico Aug. Imp. VI. Cos. III. See p. 190.
5. Æ¹. London. Fides Exercituum Cos. III. See p. 196.
6. R. London. Tr. P. XXVIII. Imp. VI. Cos. III. See p. 284.
7. Æ. med. Berlin. Tr. P. XXVII. Imp. VI. Cos. III. See p. 277.
8. Æ². London. Tr. P. XXVIII. Marti Victori Imp. VI. Cos. III. See p. 285.
9. Æ. med. Berlin. Tr. P. XXVII. Imp. VI. Cos. III. Adventus Aug. See p. 280.
10. Æ². London. Tr. P. XXVIII. Relig. Aug. Imp. VI. Cos. III. See p. 289.
11. Æ¹. Berlin. Tr. P. XXXI. Propugnatori Imp. VIII. Cos. III. P. P. See p. 306.
12. Æ². London. Tr. P. XXXI. Imp. VIII. Cos. III. P. P. See p. 307.

C. HAROLD DODD.

XII.

THE DOUGLAS FIND OF ANGLO-SAXON COINS AND ORNAMENTS.¹

ON Tuesday, June 12, 1894, whilst a labourer named John Stephen was working at the foundations for a house on the Woodbourne estate in the Derby Road, Douglas, Isle of Man, his pick displaced the top of an earthenware vessel, which fell to pieces and disclosed a number of coins, rings, and armlets, or ornaments. The spot where this hoard was discovered was about six yards from the high-road and the vessel was about 18 inches below the surface. Stephen, who appears to have had no idea of the value of the find, not only gave away a number of the coins to various people, some of whom were not known to him, but allowed the bystanders, amongst whom were several children, to pick up what they could find. Besides that much of the soil in which the treasure was buried was carted off to a tip, where many more coins were

¹ The description of the coins was written in 1895, when the hoard came to the British Museum for selection; but as I was unable to obtain particulars of the discovery of the hoard at the time, my manuscript was put on one side and escaped my memory, till I came across it a short time ago. I had therefore to turn to the local papers of the Isle of Man. In the *British Numismatic Journal*, vol. v. (1909), pp. 85-96, Mr. Carlyon-Britton has given descriptions of some of the coins of the tenth century found in the Isle of Man. In this article he mentions a few specimens which occurred in the find of June, 1894, all of which are here described.

picked up. Notice having been given to the police, who do not appear to have shown much activity in the matter, a warrant was issued on June 18 to the coroner to summon a jury in order to enquire into the discovery and to settle who was the lawful owner of the property. Enquiries were held on June 23 and 30, when full particulars were elicited. In the course of his evidence Stephen asserted that there were "hundreds of coins and nine or eleven bracelets, torques or portions of such." In attempting to clean the coins, of which he had many dozens, a large number were broken, and, moreover, every one who had got hold of any treated their coins in a similar manner and with the same disastrous results. The effect was that only a small portion of the hoard survived the ordeal. The enquiry was adjourned for some time, and on November 30 the court met for the third time, and the jury decided that the coins and ornaments were treasure-trove and therefore the property of the Crown. The result of this enquiry seems to have elicited that the hoard consisted of 180 coins or pieces of coins and of 11 ornaments comprising 7 armlets, one of which was of gold, the rest of silver, a torque, a ring, the head of a pin, &c. Of these 95 coins and the ornaments were sent by the Treasury to the British Museum for examination and selection.² Stephen, the labourer, alone is said to have secured no less than 93 coins and nine ornaments, so that not much trouble appears to have been taken by the police to

² By special request of the Treasury the selection of coins made for the Museum was small, only 19 pieces out of 95; and of the ornaments eight were retained, which included four armlets (one of gold), a ring, the head of a pin, and the pin of a brooch. Five coins went to the Royal Mint, and the remainder of the hoard was returned to be placed in the Manx Museum at Douglas.

recover the remainder, which were evidently not brought into the coroner's court, but only accounted for by those who had to give evidence.

The discovery of Anglo-Saxon coins in Scotland and in the Isles occurs but very rarely and very sparsely. A few, mostly traceable to Danish occupation, have been described, but mostly of no great importance. Perhaps the chief of all is the hoard which was found on the shore near the Storr Rock in the Isle of Skye in January, 1891. Mr. A. B. Richardson gave a full account of this hoard in the *Proceedings of the Society of Antiquaries of Scotland* for 1891-1892. It consisted of 90 coins of Edward the Elder, Aethelstan, Plegmund, Archbishop of Canterbury, and Sitric of Northumberland, embracing the period from A.D. 901-942; but what was of greater interest to the historian and the numismatist is that it included, besides the above, 18 Oriental dirhems issued with one exception³ by three rulers of the Samani dynasty, Ismail ibn Ahmad, A.D. 892-907; Ahmad ibn Ismail, A.D. 907-913; and Nasr II ibn Ahmad, A.D. 913-942, who ruled over Transoxiana and Persia, and whose reigns corresponded in date to those of the Anglo-Saxon rulers whose coins were in the hoard. These Oriental coins, which were struck in the cities of Esh-Shash and Samarkand, had travelled along the trade-route across Asia to the Caspian Sea, and thence northwards through Russia to the Baltic and onward to the shores of Denmark, whence they were carried by the invaders to England and northwards to the Isle of Skye. The mixture of these Oriental coins with the Anglo-Saxon is not altogether unusual.

³ The single exception was a coin of the Abbasids, which was so much worn that not even the name of the king or that of the mint could be read.

We need, however, only mention two other notable examples, viz. the Cuerdale (Lancashire) hoard which was unearthed in 1840,⁴ and the Goldsborough (Yorkshire) find in 1858.⁵ Like the Skye find all these Oriental pieces were of the Abbasi and Samani dynasties.

In 1852 five pennies of Aethelstan, Eadred, and Eadgar were found at Knowe in the Island of Islay.⁶ In April, 1889, in the Island of Burray, Orkney, over 136 silver torques, and armlets and portions of such ornaments were unearthed, but only three coins were identifiable. These were of Edward the Elder, Eadgar, and Aethelred II.⁷ Previously in the same year there was found at Tarbat in Rosshire a hoard which consisted of two armlets and thirteen coins, only one of which was Anglo-Saxon, viz. of Eadgar; the rest were of Louis le Bègue (A.D. 877-879), son and successor of Charles le Chauve,⁸ the Frankish king.

It is interesting to note that whilst the Cuerdale and Goldsborough hoards were of a similar nature to that found in the Isle of Skye, the two last mentioned, of the Island of Burray and of Tarbat, were allied to the Douglas Find, each one containing besides coins a proportionate number of ornaments.

I will now proceed to describe the coins in the Douglas Find.

⁴ *Num. Chron.*, 1845, pp. 1 ff.

⁵ *Ibid.*, 1861, pp. 65 ff.

⁶ *Proc. Soc. of Ants. of Scot.*, 1852, p. 218.

⁷ *Ibid.*, 1888-1889, pp. 318 ff.

⁸ *Ibid.*, 1888-1889, pp. 314 ff.

ÆTHELSTAN.

A.D. 925-941.

WITH MINT-NAME.

CHESTER.

*Type v.*⁹1. *Obv.*—✠ ÆDELSTAN REX TO BRT Rosette of pellets.*Rev.*—✠ VVLFTAN M—O LELE Small cross pattée.*B. M. Cat.*, ii. p. 109, 40, Pl. ix. 10.

LANGPORT.

*Type viii.*2. *Obv.*—✠ ÆDELSTAN REX Bust r., crowned and draped.*Rev.*—✠ FYNSILE MO LANEPOR Small cross pattée.*B. M. Cat.*, ii. Pl. x. 2; *Rud.*, Pl. 17, 10.

WITHOUT MINT-NAME.

*Type i.*3. *Obv.*—✠ ÆDELSTANRO✠ (*sic*) Small cross pattée.*Rev.*—EADM VND in two lines divided by three crosses;
above and below, three pellets (*broken*).Cf. *B. M. Cat.*, ii. p. 116, 104, Pl. x. 6; *Rud.*,
Pl. 17, 14.

⁹ The references are to the *Types* in the *B. M. Cat. Anglo-Saxon Coins*, vol. ii.

EADMUND.

A.D. 941-946.

WITHOUT MINT-NAME.

Type i.

4. *Obv.*—✠ EADMVND REX Small cross pattée.

Rev.—SARA VVARD in two lines divided by three crosses ;
above and below, three pellets.

Cf. *B. M. Cat.*, ii. p. 138, 125, Pl. xi. 2 ; *Rud.*,
Pl. 18, 7.

- 5.—Similar ; king's name, . . EADMVN . . . ; moneyer's
name MONE¹⁰ (*fragment ; halfpenny?*).

EADRED.

A.D. 946-955.

WITH MINT-NAME.

EXETER (?).

Type v.

6. *Obv.*—✠ EADRED REX Bust r., crowned and draped.

Rev.—✠ CLAC HONE . . MONE.¹¹ Small cross pattée.

Cf. *B. M. Cat.*, ii. p. 155, 112, Pl. xii. 1 ; *Rud.*,
Pl. 19, 1.

WITHOUT MINT-NAME.

Type v.

7. *Obv.*—✠ EADRED REX Bust r., crowned and draped.

Rev.—✠ MΛHNA MOHETΛ¹² Small cross pattée.

B. M. Cat., ii. Pl. xii. 1 ; *Rud.*, 19, 1.

¹⁰ Perhaps CLAC MONE (see *B. M. Cat.*, ii. p. 128, 36).

¹¹ Probably a moneyer of Exeter, as there is a specimen in the British Museum (*B. M. Cat.*, ii. p. 155, 112) which reads CLAC HONE HONE HON EX.

¹² Manna was a Norwich moneyer (*B. M. Cat.*, ii. p. 144, 1), and this coin and the one in the British Museum bearing the mint-name are precisely of the same work and style, especially in the lettering.

Type i.

8. *Obv.*—✠ EADRED REX. Small cross pattée.

Rev.—BALD RIMO in two lines divided by three crosses; above and below, three pellets.

B. M. Cat., ii. p. 145, 14, Pl. xii. 4; *Rud.*, Pl. 19, 9.

- 9–10.—Same type; moneyer's name, HVN REDM̄O or W̄O

B. M. Cat., ii. p. 149, 53, 54.

- 11–12.—Same type; moneyers' names, BĀLDRIĒ and HVNRED (*fragments; halfpennies?*).

Type i., var. a.

13. *Obv.*—✠ EADRED REX Small cross pattée.

Rev.—PVLGA RESMOT in two lines divided by three crosses; above and below, rosette of dots.

B. M. Cat., ii. p. 153, 89, Pl. xii. 3; *Rud.*, Pl. 19, 12.

14. Similar type; moneyer's name, EADM[VND]M. (*fragment; halfpenny?*).

B. M. Cat., ii. p. 147, 33.

EADWIG.

A.D. 955–959.

WITH MINT-NAME.

YORK (?).

Type ii.

15. *Obv.*—✠ EADVVIC RE Small cross pattée.

Rev.—FREO ÐERI OF+NO¹³ in three lines; above and below, rosette of pellets.

Cf. *B. M. Cat.*, ii. p. 159, 10, Pl. xii. 9; *Rud.*, Pl. 20, 6.

¹³ This is evidently a blundered coin of York. Fretheric, or Freotheric, was a moneyer of that city. There is a coin in the National Collection which reads FROÐ RIĒ M-O ON+ETO, which is assigned to York (*B. M. Cat.*, ii. p. 159, 10).

WITHOUT MINT-NAME.

Type i.

16. *Obv.*—✠ EADVVI RE Small cross pattée.

Rev.—EADV LFMO in two lines divided by three crosses; above and below, three pellets.

B. M. Cat., ii. Pl. xiii. 2; *Rud.*, Pl. 20, 4.

17-21. Same type; *obv.* legends, ✠ EADPIE REX : or REX A; moneyer, HERIE ERMO (*four fragments*).

B. M. Cat., ii. pp. 161, 162, 27-29.

EADGAR.

A.D. 957-975.

WITH MINT-NAME.

AXMINSTER (?).

Type iii.

22. *Obv.*—✠ EADGAR REX ANGLOR Small cross pattée; above which, another similar cross.

Rev.—✠ FLODVIN MONET AÆ¹⁴ Small cross pattée.

B. M. Cat., ii. p. 189, 185, Pl. xiii. 5; *Rud.*, Pl. 21, 19.

CHESTER.

Type ii.

23. *Obv.*—✠ EADGAR . . . Small cross pattée.

Rev.—DEOR VLFMO OF✠EO in three lines; above and below, rosette of pellets (*broken*).

B. M. Cat., ii. p. 171, 23, Pl. xiii. 10; *Rud.*, Pl. 21, 13.

¹⁴ This is the same moneyer as was read FIODVAN MONETAE (*B. M. Cat.*, ii. p. 189, 185). For its attribution to Axminster, see below, p. 341.

24. Same type; *obv.* legend ✠ EADGAR RE; names of moneyer and mint, TLOD VLFMO¹⁵ OL✠EO

25. Same type and *obv.* legend; names of moneyer and mint, ÐVR MODM OL✠EO

B. M. Cat., ii. p. 172, 32.

DERBY.

Type iv.

26. *Obv.*—✠ EADGAR REX TO BR Rosette of pellets.

Rev.—✠ FREDIC IN DEORABI¹⁶ Rosette of pellets.

B. M. Cat., ii. p. 169, 7, Pl. xiii. 6; *Rud.*, Pl. 21, 21.

HERTFORD.

Type v.

27. *Obv.*—✠ E[ADL]AR REX ANGLORV Bust r., wearing crown and draped; all within line of inscription.¹⁷

Rev.—✠ HA[NNA MO]NETA HIRTFOR Small cross pattée (*chipped*).

B. M. Cat., ii. Pl. xiii. 8; *Rud.*, Pl. 20, 2.

LONDON.

Type v.

28. *Obv.*—✠ EADGAR REX Bust r., crowned and draped.

Rev.—✠ ÆÐERED MONETA LVN Small cross pattée.

B. M. Cat., ii. p. 172, 36, Pl. xiii. 8; *Rud.*, 20, 2.

¹⁵ This moneyer is not previously mentioned of this reign.

¹⁶ In the *B. M. Cat.* this name is read Fredicin; but it should be Fredic in, *i.e.* of Derby.

¹⁷ This coin is not only an unpublished variety having the bust entirely surrounded by the legend, but the mint is new to Eadgar's reign. The moneyer's name was probably "Manna," though written "Hanna."

NEWARK OR NEWPORT.

Type iii.

29. *Obv.*—✠ EADLC[AR REX A]NGLORV Small cross pattée.

Rev.— MONETA NIPE[?] ¹⁸ Small cross pattée
(*fragment: halfpenny?*).

B. M. Cat., ii. Pl. xiii. 5; *Rud.*, Pl. 21, 20.

SOUTHAMPTON.

Type iii.

30. *Obv.*—✠ EADLAR REX ANGLORVM Small cross pattée.

Rev.—✠ LINAND MONETA HAM ¹⁹ Small cross pattée.

B. M. Cat., Pl. xiii. 5; *Rud.*, Pl. 21, 20.

TAMWORTH.²⁰*Type ii.*

31. *Obv.*—✠ EADLAR REX TO BRIT Rosette of pellets.

Rev.—✠ DEORVLF IN TOMFER Rosette of pellets.

B. M. Cat., ii. Pl. xiii. 6; *Rud.*, Pl. 21, 21.

WALLINGFORD.

Type iii.

32. *Obv.*—✠ EADLAR RVM Small cross pattée.

Rev.—✠ MONETA PELE Small cross pattée
(*broken*).

B. M. Cat., ii., Pl. xiii. 5; *Rud.*, Pl. 21, 20.

¹⁸ For the identification of this mint, see below, p. 341.

¹⁹ This is a new moneyer, and an unpublished type of this mint, "Ginand," seems quite an unusual name.

²⁰ When the *B. M. Cat.*, ii., was published the Museum had no coin of this mint. One was subsequently acquired at the Montagu sale. It bears the same moneyer's name, is of the same type, but the mint reads TOMEI (Montagu Sale Catalogue, November 23, 1895, lot 729).

WITHOUT MINT-NAME.

Type i.

33. *Obv.*—✠ EADLCAR REX Small cross pattée.

Rev.—ADELA VERMO in two lines divided by three crosses; above and below, three pellets (*chipped*).

B. M. Cat., ii. p. 176, 61, Pl. xiv. 1; *Rud.*, Pl. 21, 9.

34. Same type and moneyer; *obv.* legend ✠ EADLCAR RE+ $\propto$
B. M. Cat., ii. p. 175, 57.

35. Same type; *obv.* legend, ✠ EADLCAR REX $\circ$; moneyer, $\text{Æ} \text{E} \text{C} \text{E} \text{V} \text{ L} \text{F} \text{ M} \text{O}$ (*broken*).
B. M. Cat., ii. p. 176, 65.

36. Same type; *obv.* legend, ✠ EADLCAR RE; moneyer, $\text{Æ} \text{D} \text{E} \text{L} \text{ Z} \text{I} \text{C} \text{M} \text{O}$
B. M. Cat., ii. p. 177, 69.

37. Same type; *obv.* legend, ✠ EADLCAR REX $\circ$; moneyer, $\text{A} \text{L} \text{B} \text{Y} \text{ T} \text{I} \text{C} \text{M} \text{O}$.
Cf. *B. M. Cat.*, ii. p. 177, 70.

38. Same type; *obv.* legend, ✠ EADLCAR REX; moneyer, $\text{A} \text{N} \text{A}^{21} \text{ M} \text{O} \text{N}$

39. Same type; *obv.* legend, ✠ EADLCAR RE+ $\propto$; moneyer, $\text{A} \text{S} \text{F} \text{E} \text{R} \text{ } \text{D} \text{M} \text{O} \text{N}$
Cf. *B. M. Cat.*, ii. p. 177, 74.

40. Same type; *obv.* legend, ✠ EADLCAR RE; moneyer, $\text{A} \text{Z} \text{N} \text{A}^{22} \text{ H} \text{E} \text{M}$

41–42. Same type; *obv.* legend, ✠ EADLCAR REX; moneyer, $\text{C} \text{N} \text{A} \text{P} \text{ E} \text{M} \text{O} \text{I}$.
B. M. Cat., ii. p. 178, 82.

²¹ A new moneyer's name.

²² Asman was a moneyer of Lincoln under Aethelred II.

- 43-44. Same type; *obv.* legend, ✠ EADLAR REX~; moneyer,
EANV LFMO.

B. M. Cat., ii. p. 178, 85.

45. Same type and *obv.* legend; moneyer, ERID MONE
(*chipped*).

Cf. B. M. Cat., ii. p. 180, 95.

46. Same type; *obv.* legend, ✠ EADLAR RE~; moneyer,
ERID MONE (*chipped*).

Cf. B. M. Cat., ii. p. 180, 96.

47. Same type; *obv.* legend, ✠ EADLAR REO; moneyer,
HARC ERMO²³ (*chipped*).

- 48-57. Same type; *obv.* legend, EADLAR REX; moneyer,
HERIG ERMO (*some chipped; two fragments*).

Cf. B. M. Cat., ii. p. 180, 99 ff.

58. Same type and moneyer; *obv.* legend, ✠ EADLAR
REX M²⁴

59. Same type; *obv.* legend, ✠ EADLAR REXI; moneyer,
HERIG ERM::

Cf. B. M. Cat., ii. p. 180, 103.

60. Same type and *obv.* legend; moneyer, HILDO . . .
(*broken; halfpenny?*).

61. Same type; *obv.* legend, ✠ EADLAR REX; moneyer,
IVEM ONET

Cf. B. M. Cat., ii. p. 182, 114.

62. Same type and *obv.* legend; moneyer, MÆN NÆMO

- 63-64. Same type and *obv.* legend; moneyer, MÆN NÆMMO
(*one, a fragment*).

Cf. B. M. Cat., ii. p. 182, 122.

²³ A new moneyer.

²⁴ "Rex Merciorum" (?). M occurs not infrequently in the field of Eadgar's coins of this type (see No. 72), but no other specimen appears to be published with this letter after the title REX. The letter M may therefore be the initial of "Merciorum." Eadgar was King of Mercia, A.D. 957-959.

65. Same type; *obv.* legend, ✠ EADƆAR RE::X; moneyer, MAN NIMO.

Cf. *B. M. Cat.*, ii. p. 182, 123.

66. Same type; *obv.* legend, ✠ EADƆAR RE; moneyer, MANI NEM (*chipped*).

Cf. *B. M. Cat.*, ii. p. 183, 127.

67. Same type and *obv.* legend; moneyer, MAN NETMO (*chipped*).

68. Same type; *obv.* legend, ✠ EADƆAR REX::; moneyer, MORE EMAL

Cf. *B. M. Cat.*, ii. p. 183, 130.

69. Same type; *obv.* legend, ✠ EADƆAR REX; moneyer, REN NVVO²⁵

70. Same type; *obv.* legend, ✠ EADƆAR REX~; moneyer, VIBE IINIO

71. Same type; *obv.* legend, ✠ EAD[Ɔ]AR REX; moneyer, PINE MN . . .²⁶ (*broken*).

Cf. *B. M. Cat.*, ii. p. 184, 137.

Typ. i., var. c.

72. *Obv.*—✠ EADƆAR REX Small cross pattée; in field on r., M

Rev.—ÆƆELVL FESMOT²⁷ in two lines divided by three crosses; above and below, rosette of pellets.

B. M. Cat., ii. Pl. xiv. 3; *Rud.*, Pl. 21, 10.

73. Same type and *obv.* legend; M in field omitted; moneyer, LAN[D] FERƆ²⁸ (*broken*).

²⁵ Another new moneyer, "Renwald" or "Regenward."

²⁶ Probably "Winern" or "Winelm."

²⁷ A new moneyer to this reign. The letter M on the obverse may be the initial of "Merciorum" (see above, p. 333, note 24).

²⁸ This moneyer is new to this reign. He appears to have held office under Eadred (*B. M. Cat.*, ii. p. 150, 63).

74. Same, and *obv.* legend as No. 72, with M in field above the cross pattée; moneyer, LEFMAN ESMON²⁹ (*broken*).

Type i., var. d.

- 75-76. *Obv.*—✠ EADLAR RE Small cross pattée.

Rev.—ÆLF RED in two lines divided by cross between two annulets; above and below, rosette of pellets (*one broken*).

Cf. *B. M. Cat.*, ii. p. 185, 147, Pl. xiv. 4; *Rud.*, Pl. 21, 12.

77. Same type; *obv.* legend, ✠ EADLAR REX; moneyer, ÆLFZ ICMO³⁰

78. Same type; *obv.* legend, ✠ EAD[LAR] RE; moneyer, ALDE PINE (*broken*).

B. M. Cat., ii. p. 185, 149.

79. Same type and *obv.* legend; moneyer, DEOR VLF MO³¹

Type i., var. g.

80. *Obv.*—✠ EADLA[R R]E Rosette of pellets.

Rev.—✠ MAN INMO in two lines divided by three rosettes of pellets; above and below, cross pattée (*broken*).

B. M. Cat., ii. Pl. xiv. 7; *Rud.*, Pl. 30, 23.

²⁹ Another new moneyer to this reign.

³⁰ Moneyers of this name occur at the Bedford, Exeter, Leicester, Stafford, Wilton, and Winchester mints. The coins of Leicester bearing this name are of precisely the same type and show the same neatness of design. The above piece is probably therefore a product of that mint.

³¹ A moneyer of Tempsford. The coins of that mint which bear this name are of the same type and fabric (see *B. M. Cat.*, ii. p. 173, 45).

Type iii.

81. *Obv.*—✠ EADLĀR · REX Λ Small cross pattée.
Rev.—✠ DVR · A · N · D · EΣ MO Small cross pattée ;
 on l. triangle of pellets.
B. M. Cat., ii. p. 188, 168, Pl. xiv. 8 ; *Rud.*,
 Pl. 21, 14.
82. Same type and moneyer's name, and triangle of pellets
 on *rev.* ; *obv.* legend, ✠ EADLĀR REX AN
83. Same type and moneyer's name, and triangle of pellets
 on *rev.* ; *obv.* legend, [✠ EA]DLĀR REX ME³²
 (*broken*).
84. Same type ; no pellets in field on *rev.* ; *obv.* legend,
 ✠ EADLĀR REX ; moneyer's name, ✠ FASTOLF
 ✠ MOI
Cf. B. M. Cat., ii. p. 188, 170 ff.
85. Same type ; *obv.* legend, ✠ EADLĀR REX~ ; moneyer,
 ✠ FASTOLFI MON
Cf. B. M. Cat., ii. p. 188, 174.
86. Same type ; *obv.* legend, ✠ EADLĀR : REX> ; moneyer,
 ✠ FASTOLF : MONE
B. M. Cat., ii. p. 188, 174.
87. Same type ; *obv.* legend, ✠ EADLĀR REX Σ ; moneyer,
 ✠ F[A]ΣTOLF ✠ MON
B. M. Cat., ii. p. 188, 173.
88. Same type ; *obv.* legend, ✠ EADLĀR REX TO ; moneyer,
 ✠ FASTOLFE (*broken*)
Cf. B. M. Cat., ii. p. 188, 179.
89. Same type ; *obv.* legend, ... RY REX D³³ ; moneyer,
 ✠ [FASTOL]FES MO (*fragment*).
90. Same type ; *var.* two pellets in field on *rev.* ; *obv.* legend,
 ✠ EADLĀR [REX] ; moneyer, ✠ FASTOLF
 (*fragment*).

³² This must be the initials of Merciorum (see above, Nos. 58, 72).³³ Evidently a blundered specimen.

91. Same type ; no pellets on *rev.* ; *obv.* legend, ✠ EADLÆR
 REX T ; moneyer, ✠ HEROLF MONE
Cf. B. M. Cat., ii. p. 189, 187 ff.

92. Same type and moneyer ; *obv.* legend, ✠ EADLÆR REX

93. Same type ; *obv.* legend, ✠ EADLÆR REX ANG ; moneyer,
 ✠ ILOLFÆRÐEN MOT (*broken*).
B. M. Cat., ii. p. 159, 194.

Type iv.

94. *Obv.*—✠ EADL[ÆR RE]X TOB Rosette of pellets.

Rev.—[✠ ILOLF]ÆRÐ MONE Rosette of pellets
 (*broken*).

B. M. Cat., ii. Pl. xiv. 9 ; *Rud.*, Pl. 21, 21.

Northumbria.

ANLAF.

A.D. 941–944 ; 949–952.

YORK.

Type vi.

95. *Obv.*—✠ ON LAF · REX · O · Small cross pattée.

Rev.—✠ INLELÆR · O .³⁴ Small cross pattée.

B. M. Cat., i. p. 236, 1103, Pl. xxix. 7 ;
Rud., Pl. 11, 6.

Before considering the circumstances, which may account for the burial of this hoard in so unexpected a spot as Douglas, Isle of Man, it may be well to say a few words about the individual pieces in connexion with their types and mints. It will be seen from the notes to the descriptions that several new names of moneyers

³⁴ Keary (*B. M. Cat.*, i. p. 236 note) identified this coin as being struck at York (*Eoforwic*).

are met with. The numerous references to the *British Museum Catalogue of Anglo-Saxon Coins* show that so far as the types are concerned the hoard presents only one actually unpublished variety. Here and there we meet with a new obverse type in connexion with a mint such as a bust instead of a cross or a cross instead of a rosette; but we must not consider these as varieties of type in their full meaning. The one variety is met with in No. 27, on the obverse of which the bust of the king is placed wholly within the legend, whereas in all previously known pieces of Eadgar of this type, the bust at its base divides the legend. This coin, which is of Hertford, also supplies a new mint to this reign.

The mints represented under each reign are:—

Aethelstan—Chester and Langport.

Eadred—Exeter (?).

Eadwig—York.

Eadgar—Axminster, Chester, Derby, Hertford, London, Newark or Newport, Southampton, Tamworth, and Wallingford.

Most of these were well-known mint-places; but we may select as being of somewhat special interest those of Langport, Axminster, Hertford, Newport, and Tamworth, for a few remarks. The hoard seemed to contain specimens of the earliest issues of those places. I will take them in the order of the descriptions.

LANGPORT (Somerset).—The history of this small town in Somersetshire has lately been given in a work entitled *Langport and its Church* by the Rev. D. M. Ross. It was of very old Saxon foundation, certainly not later than the middle of the seventh century, and perhaps earlier, as the name of Llongborth, supposed to be the ancient name of Langport, occurs in an early poem by

Llywarch Hen, a prince poet of Cumberland of the sixth century. This identification is, however, somewhat uncertain; but there is ample evidence that Langport existed a century later. Situated on the river Parrett and accessible by water from the Bristol Channel, it formed at an early date a port in the fighting line between the Saxons and the Britons. It was on the Parrett near Langport that King Ine defeated the British king Geraint, and we know what an important position it held when Alfred withstood the attacks of the Danes, having taken refuge at Athelney situated only a few miles, and plainly visible from the hill at Langport. It was at Aller, a couple of miles distant, now only a small village, that Guthrum and his followers were christened.

The importance of Langport as a defensive position made it necessary to surround it with earthwork fortifications, so that the town was raised to the dignity of a burgh, and in the eighth century it was assigned 600 hides of land though it was within the hundred of Somerton, where King Ine had a royal residence. There is no indication that it possessed a mint in its early days, and so far as we know its first issue of coins was in the reign of Aethelstan, when under the enactment of the Synod of Greatley each burgh was entitled to have one moneyer, and certain places of greater importance two or more. Langport was evidently entitled to one moneyer only; so that under Aethelstan we possess only two names, Wynsige (the Winner of Victory) and Byrthelm (the Polished Helmet), evidently retainers of the king, and holding high positions. After this time Langport appears to have only exercised its right of coinage under three subsequent reigns, viz. of Cnut, Harthacnut, and Edward the Confessor; but even then

to a very limited extent, as under the first we have the names of four moneyers; under the second, two; and under the third, one only. After Edward the Confessor Langport disappears as a mint-town, though it always remained an important trade centre on account of its accessibility to the sea.

As the Douglas find did not extend beyond Eadgar, the only reign represented by the Langport mint is that of Aethelstan, and by a single coin. The moneyer's name is Wynsige, and his coin supplies a new obverse type to this mint, viz. the crowned bust of the king. Previously known coins of this moneyer had on both sides, obverse and reverse, a small cross pattée. The reading *ÆDELSTAN REX* instead of *ÆDELSTAN REX TO BRIT* is also unusual for Wynsige. It is very interesting that so rare a mint should be identified with this small hoard which was concealed at a distance of so many hundred miles, and also that it should offer at least two new varieties. The name of the town is spelt as now *LANEPORT* instead of *LONEPORT* as on Wynsige's previously known coins. Byrthelm, who evidently succeeded Wynsige at the mint, always gives the name as *LANEPORT*.

AXMINSTER (Dorset).—The attribution of the coin of Eadgar (No. 22) to this place is somewhat doubtful. Like Langport it was an early Saxon place as Aethelstan founded there a minster. It is probable that it had already existed as a burgh, though no coins are known of it before Eadgar, if the attribution is correct. It is quite possible that time may show that a mint existed there under Aethelstan. Its situation on the Axe must have rendered it a stronghold against the attacks of the Danes, who made the coasts of Dorset their more

immediate landing-places. The late Mr. Montagu was, I believe, the first to claim this place as a mint-town, for in his collection there were three coins of Eadred which he assigned to it, viz. one reading VINE MONET AX; the two others, MANNĀ MONETĀ. In the *Brit. Mus. Cat. (A. S., vol. ii. p. 189, No. 185)* is also described a coin of Eadgar reading FICDVAN MONET. AC, which is practically a duplicate of the Douglas piece, though not struck from the same dies. The Museum coin was not assigned to any particular mint; the legend MONETAC being looked upon more as a blunder for MONETAR. In the Montagu collection there was also a coin of Cnut reading LEOFFINE ON ACX, which was also assigned to Axminster. It is very possible that this piece induced Mr. Montagu to give the three coins of Eadred also to that place. It could very reasonably be suggested that these coins belong to Exeter, the first letter of the name being accidentally omitted. This might well be; but, nevertheless, Mr. Montagu's view is quite worthy of careful consideration as Hildebrand (*Ang-Sachs. Mynt*, p. 203) describes a coin in the Copenhagen Museum, also of Cnut and of the same moneyer, which reads LEOFIN ON ACXEPO, which sounds more like Axminster than Exeter. Hildebrand has not ventured to give this coin to any particular place; he puts a mark of interrogation as if he was in doubt. Evidently he did not think that it related to Exeter. As this is a point which still wants clearing I have in the hoard assigned the coin to Axminster, since it is thus more likely to attract attention than if assigned to Exeter.

HERTFORD (Hertfordshire).—I have specially noted this mint because the coin (No. 27) of Eadgar in the Douglas Find belongs to one of its earliest issues.

There was in the Montagu collection a coin of Eadwig

ÆBE

which reads on the reverse + H + IR + *i.e.* Abenel HIR,
NEΓ

and which the owner assigned to Hereford. It might, perhaps, with more reason be given to Hertford.⁸⁵ We may therefore conclude that this place received the right of coinage under Aethelstan, though at present there appears to be no coin known so early. Mr. Carlyon-Britton⁸⁶ states that Eadmund also struck at Hertford, but he does not mention his authority. The piece in the Douglas Find, reading ✠ HA[NNAMO]NE TA HIRTFOR may without question be given to Hertford, and not Hereford. The former mint was in operation subsequently during the reigns of Aethelred II, Cnut, Harold I, and Edward the Confessor, and under the Norman kings; but at no time were the issues large.

NEWARK or NEWPORT.—The right attribution of the coin of Eadgar described under No. 29 is also fraught with some difficulty. Unfortunately it is only a fragment, the name of the moneyer being lost. The legend reads MONETA NIPE. Are we to assign this piece to Newport in Monmouthshire or to the town of the same name in Shropshire or to Newark in Northamptonshire? In the *Brit. Mus. Cat.* (*A. S.*, vol. ii. p. 160) is given

CLXC

a coin of Eadwig reading + IIE + PE. *i.e.* CLXC MONE NEPE.
MONE

It is there assigned doubtfully to Newark in Northamptonshire. In the Introduction (*op. cit.*, p. cxvii) some doubt is expressed, and it is suggested that the coin may have been struck at Newark in Nottinghamshire, in which

⁸⁵ This coin is now in the National Collection.

⁸⁶ *Brit. Num. Journ.*, vol. vi. p. 175.

city a castle is said to have been built by Ecgbeorht. This manor was subsequently held by Leofric, Earl of Mercia, and in *Domesday* Godiva, his countess, appears as paying the danegelt for it. As, however, the Douglas coin reads NIPE and not NEPE, we are disposed to associate it with Newport; but the question again is, with which Newport? In the *Num. Chron.*, 3rd Series, Vol. V. pp. 256-258, Sir John Evans has described a number of Anglo-Saxon coins, which formed part of a hoard unearthed in London in 1872, and which is known as the "City Hoard." In that find there were two coins of Edward the Confessor reading SÆPAN ON NIPEP, which he attributed to Newport in Cornwall after considering the claims of the other Newports in England, including the towns of that name in the Isle of Wight and in Monmouthshire. That the coins represented a town named Newport there can be no question, for others of Edward the Confessor, which were in the Chancton Find read SIREDD ON NIPEPORTE and SIREDD ON NIPEPO³⁷. Sir John Evans, however, was not quite satisfied with this attribution because he said we cannot with certainty determine the date when Newport in Cornwall changed its name from Lanstephadon or the town of St. Stephen's Church.

It is dangerous to differ from a man of Sir John Evans' calibre, but I do not think that he was altogether happy in his selection. There are two other Newports which seem to me to have better claims for the privilege of a mint, viz. Newport in Shropshire and Newport in Monmouthshire. Sir John Evans' objection to the former was that it was too near Shrewsbury, the distance

³⁷ *Brit. Mus. Cat.*, A. S., vol. ii. p. 418, Nos. 1087-1088.

between the two towns being about 17 miles.³⁸ This town was situated near the line of the Roman Watling Street in the north-east border of the county. Its charters go back to Henry I, but it was evidently an early foundation. The objections raised to the claims of the Monmouthshire town were that it was a modern town in the time of Giraldus Cambrensis, and that Edward the Confessor does not appear to have had any mints in Wales.³⁹ These objections may be overruled because Monmouth was close to the border of Gloucestershire and Giraldus called it the *Novus burgus* or the *New Town*, in contradistinction to the more ancient town of Caerleon. There is no question of the antiquity of its foundation; but it did not come into great prominence until the decline of Caerleon, which had no mint. This was towards the end of the Anglo-Saxon period. It was in the reign of Henry I that Robert of Gloucester erected a castle there for the defence of his possessions, which was called the Castle Newydd, or *New Castle*, no doubt to distinguish it from the one at Caerleon which was of earlier date. I am therefore disposed to give these Newport coins to the town in Monmouthshire⁴⁰ and to the one in the Douglas find may be added another piece, also of Eadgar, reading on the reverse ✠ÆLF SIGE MO NO NIFANPO. This coin,

³⁸ Langport is only fourteen miles from Taunton, and Taunton about the same distance from Watchet; and all had mints during the Anglo-Saxon period. Sir John Evans' objection as to distance does not therefore appear to hold.

³⁹ In *Brit. Num. Journ.*, vol. ii. pp. 81 ff., Mr. Carlyon-Britton has since described a coin which he attributes to Howel king of North Wales (see below, p. 346).

⁴⁰ Mr. Carlyon-Britton (*Brit. Num. Journ.*, vol. vi. pp. 32-34) is in favour of Newport in Buckinghamshire, a town mentioned in *Domesday*.

now in the British Museum, came from the Montagu collection. The early name of the town was evidently NIPEPORTE or NIFANPORTE.

Of TAMWORTH (Staffordshire) I have nothing to add to Mr. Andrew's account of this mint in the *Num. Chron.*⁴¹ The earliest coins of that town at present known are of Eadgar, and from the two specimens in the National Collection the early spelling of the town's name was TOMFORÐ. As the burgh there was built by Ethelfreda, Lady of the Mercians, in A.D. 913, we shall expect some day to come across coins of Aethelstan struck there.

The discovery of this hoard of Anglo-Saxon coins so far north as the Isle of Man may at first seem surprising; but when we consider the events which occurred during the latter part of the reign of Eadgar, this burial can possibly be accounted for. There is no Isle of Man series of this period. What currency did then exist must have consisted almost entirely of Anglo-Saxon coins with a preponderance of such as were issued in Northumbria and by the Hiberno-Danish kings. It is, therefore, remarkable that only one Northumbrian coin (a piece of Anlaf, see No. 95) existed in the hoard, whilst there were proportionately so many which had come all the way from the south of England. Let us, however, see whether this circumstance can be accounted for.

It is well known that the sixteen years' reign of Eadgar was one of the most peaceful of the Anglo-Saxon rule. His policy towards the Danes was of the most

⁴¹ 4th Ser. Vol. I. (1901), pp. 415 ff.; and pp. 430 ff.

conciliatory nature, and that population lived peacefully under his supremacy. He carefully forebore from interfering with their customs and internal affairs, and in his own laws he said, "I will that secular rights stand amongst the Danes with as good laws as best they may choose." In consequence the realm was undisturbed by invasions from abroad. We cannot, therefore, well associate the burial of the Douglas find with any Danish incursion as has been possible with many of similar date. Eadgar's military expeditions were connected mostly with disturbances in North Wales and in Northumbria. He divided the latter into two separate kingdoms, vesting the southern part, Deira, in Earl Oslac with York as his capital, and to Earl Osulf was assigned the country beyond the Tees. To ensure peace from outside, however, he kept up a great fleet which was always sailing about the coasts.

In 965 on account of quarrels between the petty kings of North Wales Eadgar went north to assist Howel against his uncle Jago, who, on the other hand, received help from the Norse, amongst whom were Magnus (or Maccus), king of the Isle of Man, and Seferth, lord of the Isles. Howel was successful in driving out his uncle, and seized his kingdom of Gwynedd. For this assistance he did homage to Eadgar and promised to be his fellow-worker by sea and land.

Eight years later Eadgar was crowned "King of All Britain" at Bath by Dunstan, Archbishop of Canterbury, and Oswald, Archbishop of York, on May 11 (Whitsun Day), 973. Shortly afterwards he sailed round the north coast of Britain with a large fleet and landed at Chester. Here he was met in accordance with his orders

by eight⁴² tributary kings, who were Kenneth, King of the Scots; his son Malcolm, King of the Cambrians; Magnus or Maccus of the Isle of Man; Seferth of the Isles; Dunwaller (Dafonal) of Strathclyde; and three other princes, Howel and Jago of North Wales and Juchil of South Wales. These all swore fealty and bound themselves to military service by land and sea. Attended by them Eadgar one day went on board a boat, and whilst they plied the oars he took the helm, and steered skilfully down the course of the river Dee, and followed by the whole retinue of earls and nobles, pursued the voyage from the palace to the monastery of St. John the Baptist. Having paid his devotions there he returned to the palace in the same pomp.⁴³

We have thus two occasions on which the coins in the Douglas hoard could have been brought to the Isle of Man, viz. in 965 when Magnus helped Jago the Welsh king, or in 973 when Magnus joined Eadgar at Chester. At first sight one would be inclined to connect the coins with the first event as perhaps being the greater of the two; but from the fact that the hoard represented all the main types of the coins of Eadgar, and therefore must have been buried at the end of or very shortly after his reign, we would associate it with the excursion on the Dee in 973. Eadgar died two years later. The absence with one exception of Northumbrian coins shows pretty clearly that the hoard was not locally made, and so strengthens the supposition that it came from a more southern district. Most of the coins being in fine condition, though many were broken, the burial of the hoard

⁴² The *Anglo-Saxon Chronicle* and Henry of Huntingdon count only six of these tributary kings.

⁴³ Florence of Worcester, s A. 973.

must have occurred not much later than A.D. 975, or perhaps even a year earlier. It seems, therefore, quite possible that it was the property of one of the retinue of Magnus, the king who accompanied him to Wales in the year 973.

H. A. GRUEBER.

XIII.

ENGLISH MINT ENGRAVERS OF THE TUDOR AND STUART PERIODS, 1485 to 1688.

It is, I believe, an accepted proposition that the coins and medals of these two dynasties include the great majority of the finest examples of the die sinker's art as practised in this country. That being the case, I venture to hope that a complete list of the engravers and their deputies, when the latter have been recorded, will be a not unwelcome addition to our numismatic history ; so that, given a coin-type of which the date is known, it may be possible to indicate with reasonable certainty the person who was responsible for it.

Ruding, it is true, has included a number of engravers in his chapter on the "Constitution of the Mint," but there are unfortunately many blank spaces.

In the chronological list which I have prepared some names will, of course, be recognized as old friends, and there are others who may be greeted as new acquaintances, but it has been possible, in the course of an investigation extending over two years, to append to each name the date of the appointment. In some instances there was a joint grant of the office, under which the Crown obtained the services and advice of two artists for one annual fee, which appears to be scarcely an equitable proceeding.

A few introductory words as to the duties of these men may prove useful. The chief graver was invariably appointed by the king or queen, the under-graver sometimes by the Crown, and, in some reigns, by the head of the Mint, the practice not being uniform.

The gravers were strictly bound not to work elsewhere than in one house assigned by the warden for that purpose within the Tower. The irons when graved were to be delivered by indenture (*i.e.* with a written statement) in the presence of the warden, the master-worker, and the controller, to the clerk of the irons, "to whom it was ordained to have the keeping thereof." The last-named official was to make a true account of blank irons delivered to the graver, and all worn-out or faulty dies were to be defaced in the presence of the warden, &c.

During the two hundred years of which I am speaking, the term *cuneator*, one of high antiquity, is not found in any original grants or Exchequer papers. It would seem that the title and the office, with all that the latter implied, had fallen into disuse long before the advent of the Tudors, the word *sculptor* being then always employed.

The salaries attached to the appointment, varying from £10 to £40, may appear to be small, having regard to the responsibilities involved, but it should be borne in mind that these sums covered routine business only; whenever any new coins, seals, or medals were ordered the additional payments were very substantial. Under the Stuarts the deputy-graver's annual fee generally exceeded that of his chief, but it would appear that the former did not share in the occasional windfalls.

HENRY VII.

Nicholas Flynt.

A writ directed to the Barons of the Exchequer dated October 27, 3 Henry VII (1487), recites, *inter alia*, that by letters patent of May 17 then last past, the office of graver of the irons for coining gold and silver within the Tower of London and elsewhere in England had been granted to Nicholas Flynt during his life, to be exercised by himself or by a sufficient deputy from the preceding Easter, and with a fee of £20 yearly as has been paid to William Wodeward, formerly graver of the irons to Henry VI (K. R. Mem. Roll. Mich. 3 Henry VII).

It is to be feared that this individual was a pluralist of the worst order, seeing that the above grant also appointed him as controller of the exchange and assayer of the moneys within the Tower, and that in 1490 he received the additional offices of controller and surveyor of the mints in Dublin and Waterford, during good pleasure. Flynt is entitled, nominally at all events, to the credit of having produced the dies for the second, or arched-crown, coinage of the king's eighth year, but his tenure of the office had ceased in, or just before, 1494.

It will be recalled that the silver coinage of the third issue of Henry VII departed from the customary full-face representation of the king, and introduced, among other changes, a profile head which marks the beginning of real portraiture upon our English currency.

Mr. C. F. Keary, writing in *Coins and Medals* (1894), describes this profile portrait of the first of the Tudors as "being a work of the highest art in its own kind. Nothing superior to it has appeared since." The identity of the graver who gave us this new type has

hitherto remained undiscovered, and I feel glad to have rescued his name from the shadows of the fifteenth century.

Alexandre de Bruchsell.

It must, however, be confessed that the artist was probably not an Englishman; his name, which bears a phonetic resemblance to Bruxelles, or Brussels, suggests that he was a Fleming by birth, but I find no letters of naturalization as in the case of Briot in later times. The document which appointed Bruchsell to the Mint contains several features of interest, and is worth quoting more fully than the majority of similar grants.

Letters of privy seal were issued at "our monastery of Abendon" on December 31, 16 Henry VII (1500), and directed to the Barons of the Exchequer, wherein it was recited that the king in the Feast of Michaelmas in his tenth year (*i.e.* 1494) had appointed "by our mouth" Alexandre de Bruchsell to the office of graver of the coining irons within the Tower of London, during pleasure, with a fee of £10 yearly payable at Easter and Michaelmas. This amount had been paid to the grantee by William Stafford, the warden, for six years then past, and the Barons were instructed to allow such sums when passing the Mint accounts. The letters go on to say that as the business and labour of the said Alexandre daily increased, for as much as the king had restrained the mints of Canterbury, York, and Durham for a certain season, he should receive convenient wages for his labour in the said office until the contrary was ordered (K. R. Mem. Roll. Hil. 16 Henry VII). Bruchella, to mention one of several variants of his name, performed

his duties at the Tower until the end of Henry's reign, a period which included the third issue coinage of 1503 ; we may, therefore, with confidence believe that it was he who designed and prepared the dies bearing the profile portraits. The latest mention of his name which I can find is on the occasion when he sealed a receipt for a half-year's salary on April 16, 1509, five days before the king's death (Exch. Accts. 296/2). His grant did *not* authorize him to employ a deputy, and therefore he may be regarded as the father of English medallic portraiture.

HENRY VIII.

There is no evidence that the new monarch retained the services of the talented Flemish engraver ; on the other hand, there is good reason for thinking that Henry VIII nominated, as soon as might be, one of his own favourites. But whether Bruchella was dead or only in retirement, his handiwork was not discarded ; the son continued to display his father's lineaments for some eighteen years, if the change in the portrait of Henry VIII has been assigned to the correct date.

John Sharp.

The earliest appointment in this reign was on February 12, 1509-10, when John Sharp, who was afterwards knighted, received a grant as graver of the irons for gold and silver coins in the Tower, in the realm of England and in Calais, during pleasure, from Michaelmas then last. The office was to be exercised by himself or a sufficient deputy, at a fee of £20 *per annum*. This occupant of the post can have influenced the work at the Tower in only a very slight degree, seeing that

the dies in current use for the silver coinage were reproductions of his predecessor's skill, and that the types of the gold pieces were but little altered from those of previous rulers.

Henry Norres.

On February 20, 1518-19, the office of graver ("now, by the death of John Sharp, knight, in our hands") was conferred upon Henry Norres, or Norreys, *armiger*, in terms almost identical with those of the last grant, saving only that it was to be for life. In the king's 13th year the Tower mint was ordered to supply to Durham trussels and piles for pence; paying for every dozen of irons as of old time (Harl. MSS. 660). In 1523, April 24, further letters patent were issued to Norreys, his annual fee of £20 being payable from the revenues of co. York (Pat. Rolls, 10 H. 8, part 2, and 15 H. 8, part 1). This officer had an excellent opportunity of proving his capabilities, or those of his deputy, when Henry VIII issued his second coinage in 1526. On that occasion the silver coins were provided with another portrait, viz. of the reigning king, and gold pieces of new types and denominations were devised; these alterations, coupled with certain minor amendments, must have employed the workers in the graving house for a considerable period. On the whole, I think it will be agreed that Norreys acquitted himself well. There was, in 1530, another warrant to deliver coining irons to the bishop's mint at Durham, and a similar order was made in 1532 with respect to the Archbishop of York.

Norreys is, as far as I am aware, the only occupant of the post, during these two centuries, who met with a violent death while serving upon the staff of the Mint.

The month of May, 1536, saw him beheaded on Tower Hill, for a reason, good or bad, altogether unconnected with the industry carried on within a bow-shot of the scaffold.

Thomas Wriothesley.

The vacancy thus created was filled on May 29, 1536, by a grant of the same privileges to one who in later years held several high positions in the State, including the Lord Chancellorship (K. R. Mem. Roll, 316, 29 H. 8). Wriothesley's tenure of the post at the Tower continued until, at least, Michaelmas, 1543, so that we shall probably be correct in assigning to him, or to his agency, the introduction of Henry's full-face portrait on the debased coinage of 1542, among which was the first issue of the teston.

During the year 1544 there was a reorganization of the whole establishment, one result being that the deputy or under-graver, for the first time, obtained a definite *status*, his name generally appearing in the accounts and other records of subsequent years.

The name "Demaire" occurs in Ruding's list for this reign, but I have failed to trace any one who could be the same person. Possibly he was a deputy under Sharp or Norreys.

Henry Bayse.

Under the new *régime* Henry Bayse, or Basse, *capitalis sculptor ferrorum monete*, received letters patent of November 5, 1544, which were to be effective from Lady-day then last, during good conduct. The absence of any concession as to performing the duties by a deputy

is a little significant, and may have been the cause of an increase of £10 in his annuity which was allowed in April, 1545, by a second grant (Pat. Roll, 36 H. 8, part 24). The under-graver, Robert Pitt, was installed in 1546, at a fee of £10, and was soon joined by a colleague, of equal rank, named John Lawrence. This trio, Basse, Pitt, and Lawrence, formed the official staff during the remainder of Henry's reign. There were, in addition, two supernumeraries, Jerham and Frauncis Bennold, employed by command of the king "for the experiment of their knowledge." For a period of three months after 26 March, 1545, they received meat, drink, and pay at the rate of £40 per annum. It is at all events curious that the adjoining entry in the account refers to certain gold and silver coins which were delivered to His Majesty, that he might view the print and stamp (Exch. K. R. Accts. 302/27). Before leaving Henry VIII it is necessary to add the fact that by letters patent of April 5, 1546, Giles Evenet became graver at the newly opened mint in Bristol, a departure from the practice usually obtaining at that time in respect of country mints.

EDWARD VI.

Basse continued to work as chief graver after Edward's accession, but it may be expected that he was more engaged in adding to the number of Henry's dies than in preparing new irons for the young king's portraits and titles. One of the accounts tells us that the chief became aged and weak, and that Pitt "did sustaine thole travell of the said service" which otherwise "cold not have ben done."

Robert Pitt.

The old man retained his position until Michaelmas, 1549, when he was succeeded by Robert Pitt, who obtained his formal grant in March, 1549-50. John Lawrence still kept his post as assistant. At this point there was another importation of an expert from the Continent. Anthony Levers, "a Frenchman," was employed for some time between October, 1547, and the same month in 1550, and was apparently accompanied by "certain French and Dutch men set about the graving of irons within the Tower." The "prentyses" of the graver and under-graver are now mentioned, and we also learn that 593 dozen and 2 of coining irons at 7s. 3*d*. the dozen were provided during the three years in question (Audit Office Accts., 1670/495).

Pitt did not live to enjoy his promotion for any length of time; on August 19, 1551, Sir Edmund Peckham was ordered to stay from giving the office of graver of the Mint, and to see the workmanship of John Gramvett, and to certify whether he was fit or no (Acts P. C.). I cannot regret that the candidate was unsuccessful, as his election would have barred the way to one of the family of graver-goldsmiths who bore the surname of Anthony.

The mint in Ireland requires a passing word. Harry Coldwell was engaged at Dublin Castle during a considerable portion of this short reign, but no record of his appointment is now forthcoming. He also engraved the great seals of England and Ireland, and other public but less important seals (Acts P. C. 1547).

Derick Anthony.

Under the date June 1, 1552, I find letters patent addressed to Diric Anthony bestowing upon him, as from Michaelmas then last, the post at the Tower recently held by Robert Pitt, deceased, with an annuity of £30 during good pleasure. This official was the first of three successive generations of the same family, who controlled the graving house for a space of 67 years in the aggregate, with credit to themselves, and gain to the art of their country (Herald's Visitation, London, 1567, Harl. Society).

A somewhat difficult point now arises. Robert Pitt had apparently died shortly before August, 1551, Anthony succeeded him at Michaelmas in the same year, and the striking of Edward the Sixth's fine silver coinage was in progress during the autumn and early winter, October to December, 1551. To whom ought we to attribute the new designs? A consideration of the dates seems to indicate Pitt, but I am disposed to think that the dies were the handiwork of his successor, Anthony.

MARY.

The queen made no change in the existing arrangements, either before or after her marriage with Philip of Spain, so Derick Anthony, with John Lawrence as under-graver, remained at the Tower, and was responsible for all the English and Irish moneys, as far as their types were concerned.

ELIZABETH.

The last of the Tudors was also content to rely upon the skill of the chief engraver who had been in the

service of her half-brother and half-sister, and the position remained unaltered for 41 years. Meanwhile, William Cure had been engaged to assist Lawrence the under-graver, and the latter after a few years gave place to Humphry Cole. The queen at one time thought of consolidating the two offices after Anthony's death, but eventually refrained from taking that step. There was also a proposal that if the graver or the sinker negligently omitted the privy mark or the rose from any puncheon, though only two or three pieces might be struck, the master-worker should forfeit £2000. There was naturally a protest against such a penalty, and it was withdrawn (Harl. MSS. 698).

Charles Anthony.

The time then came for Derick Anthony to be gathered to his fathers, and Charles his son was appointed in his stead, the letters patent of July 12, 1599, authorizing him to make the coining irons for England during his life. He was also to be cutter and engraver of signets, badges, seals, shields, stamps, and royal arms. There was permission to exercise the office through a deputy, thus reverting to the old practice, but such evidence as is available shows that he, a goldsmith, did not take advantage of the proviso. For example, he had been bound over to appear at Newgate Sessions for refusing to collect funds for Christ's Hospital, but the Privy Council absolved him on the ground of his daily attendance at the Mint. In 1601 John Rutlinger was acting as under-graver, but retired temporarily in favour of John Baptist van Landen, who continued to assist Anthony until the end of the queen's life. About this

date a sum of £12 was disbursed for "patternes, ponnchions and workmanshipp" for the pieces of 5s. and 2s. 6d., and £221 for making seals, &c. (Exch : Accts., *passim*.)

JAMES I.

The accession of the Scottish king found Charles Anthony and his last-named assistant still in charge of their department at the Tower. The chief graver, in addition to his work in preparing dies for the new English coinage, received warrants in 1603 and 1604 to make the dies for the Irish currency, the portraits on which differ in some degree from those on the larger series. The occurrence of several varieties of the king's bust on the English coins during the earlier years of the reign suggests that Anthony was at first unable to satisfy the royal wishes with regard to a likeness. John Rutlinger had now returned, and apparently worked with John Baptist van Landen until the latter's decease or retirement in 1606. After that year, Rutlinger and John Dycher were *inferiores sculptores*, with a salary of £40, until the former died in 1609, when Dycher worked for about ten years without a junior colleague.

At a date shortly before Michaelmas, 1615, Charles Anthony died, his will being registered in P.C.C., 105 Rudd.

Thomas Anthony.

His son and successor, Thomas, immediately took over the duties, as may be learnt from the Mint accounts of the period, but the enrollment of the letters patent appears to have been omitted. The grandson of old

Derick Anthony survived for about three years only, as his name disappears from the salary list after March, 1618. His will may be found in P.C.C., 42 Meade.

William Holle.

The next chief graver was William Holle, *generosus*, his grant being issued on May 29, 1618. He was to hold the office on the same terms as those under which his three (named) predecessors had held it. The *Numismatic Chronicle*, Series IV. Vol. VII. p. 346, contains an article from Mr. Grueber's pen, describing many incidents in the life of this official and alluding to the coins which might be considered to represent his work. Miss Farquhar, in the succeeding volume, p. 273, contributed a supplementary note on the same topic.

Holle, or Hole, received the help of John Dycher until 1620, when Charles Greene, to whom the junior post had been already granted in reversion, took his place. It will have been observed that the mortality among the gravers during the first quarter of the seventeenth century was, indeed, remarkable, and Holle was scarcely an exception, but during his time he had at least one opportunity of proving his fitness to be a successor to the Anthonys. In the twelve months ending March 31, 1620, he was paid £120 for making twenty-six patterns, stamps, and irons for the coining of the newly made gold moneys; this occupied him for half a year.

In 1623-4 gravers were "prest upon extraordinary occasion of service," at 5s. a piece *per diem*. This, I presume, refers to copyists only, as no one is mentioned by name.

John Gilbert and Edward Greene.

Letters patent of September 24, 1624, disclose the fact that William Holle had then departed this life, and that, in consequence, John Gilbert and Edward Greene were jointly appointed to fill the vacancy, as from midsummer in that year (Audit Office Accts., 1595/5 to 1597/24).

CHARLES I.

This reign begins with John Gilbert and Edward Greene as chiefs, and Charles Greene as their assistant.

In the twelve months ending March 31, 1626, Edward Greene received £220 for making patterns for six kinds of gold and seven kinds of silver coins, and for his pains during eight months. These probably represent the first issue of money by the new king.

On April 16, 1625, a warrant directs Edward Greene to make and engrave the great seals of England and Ireland and other smaller seals; a second order authorizes him to take up four men for the more speedy despatch of the work. A strange contradiction of these two warrants arises on September 4, 1626, when the king instructs Briot to make the seal of England, an incident quite typical of the cross currents which developed at the Tower.

The subsequent history of the gravers on the staff of the Mint is so interwoven with that of the supernumeraries brought in by the king, and by parliament, as to render a description of their respective spheres of work almost impossible within the compass of this paper. Abraham Vanderdort was one of those who were thus favoured by Charles I, and presented with offices which encroached

upon the privileges of other servants of the State; he was appointed to be embosser of medals in April, 1625, and in the next month was ordered to devise patterns for the king's portrait. In July, 1625, he was to view the stamps for coins and to lend aid to the engraver, duties which would cause him to be regarded with unfriendly eyes. Vanderdort, although never formally associated with the Mint, did in fact produce a 20s. gold piece which was commended in high quarters, but the Tower authorities promptly rejected it in 1626 as being unsuited for general circulation. There I may leave him, in order to discuss another royal favourite who exercised a lasting and beneficial influence over the coinage and kindred productions.

Although this is not an occasion for attempting a sketch of Nicholas Briot's life, even in bare outline, I would crave leave to quote the essential parts of two recorded episodes, hitherto unprinted, which should not be neglected by any future biographer. The first relates to his genius as an artist, the other to his skill as a mechanician.

The earliest reference to Briot appears to be in a signet warrant of April, 1626, which transfers to him a sum of £100 for making pieces of largesse, but obviously this must have been preceded by instructions to sink the dies in question.

I do not propose to set out any of the edicts, letters, commissions, warrants, and other verbal missiles which accompanied every stage of Briot's quarrel with the resentful Mint officers, but to pass on to the letters patent which are commonly known as the "free denizen" grant. Rymer, in vol. xix. p. 40, accords to this document the briefest of head notes, but numismatists may

prefer to know something of its contents, which run as follows:—

Patent Roll, 4 Charles I, part 11, m. 5.

Nicholas Briott “borne in the realme of Fraunce” is made a free denizen of England in consideration of good and acceptable services done and that he might be capable of holding such preferment as his Majesty intended to bestow upon him. And whereas the king found by experience that the graver of his moneys was not at all times and places provided with such good and proportionable forms and patterns of his effigy as were necessary to frame imitate and conform his irons and stamps for all coins, and that the imperfection and inequalities that appeared in the fabrication of the said moneys, besides their deformity, caused and offered facility and boldness unto false minters to counterfeit all sorts of money. And having resolved to remedy all such imperfections and considering the good report made of the said Nicholas and the particular knowledge of his dexterity, whereof there was testimony already during the space of three years by divers work perfected by him at the royal command, the king had referred a petition touching the office of graver to the mint to two officers of the Household who had certified that Nicholas should not “intermeddle with the graving of anything that carried our arms,” but that he might safely make and frame the first designs and effigies of the king’s image in such sizes as would serve for all coins of gold and silver, “to be put into the hands of our graver thereby to conform their work together;” with medals of all sorts and metals representing the king’s or his consort’s effigies, and all other coined pieces which might convey to posterity the mark or character

of worthy successes, accidents or great actions in that time. Wherefore the king granted to the said Nicholas the privileges aforesaid and the profits arising therefrom. All other persons were prohibited from engraving, imitating, casting or selling any medals which had been or should be made by the said Nicholas, who had authority to keep in his sole custody all engines or devices for framing the coins and medals. Provided always that Nicholas should covenant to deliver the first designs and effigies into the hands of the gravers of the mint and to use the same for no other purpose. And the king having weighed the petitioner's services theretofore done and to be performed in the future, granted to him the wages and fee of £250 by the year, from Michaelmas that was in the year 1626, by equal quarterly payments, and during pleasure. The enrollment of the letters patent was to be sufficient warrant for payment by the Exchequer. Dated, 16th December (1628).

After such a tribute to the "Frenchman" and such a caustic indictment of John Gilbert and Edward Greene, can it be a matter for surprise that the Mint officials were actively hostile to the intruder? Unless this order was revoked, of which there is at present no evidence, the two engravers at the Tower and their successors were reduced to an entirely subordinate position as regards portraiture.

Edward Greene.

Returning to the main subject, in the latter half of 1628 Gilbert retired, with a pension of £50 as a solace. Thereupon Edward Greene became sole chief graver, and received on October 14, 1630, another patent, with £30 annually for life, the surrender of the joint letters

being recited in his new grant. Charles Greene was still assistant.

The second of the two incidents in Briot's history to which I have previously alluded shows him in another character, viz. as a working moneyer at his bench in the Tower, striking coins according to his own method, and competing with the representatives of the Provost and Company of Moneyers in a trial of skill between the new system and the old, the press *versus* the hammer.

From the accounts of the master-worker I have extracted the following details:—

Among the disbursements during the year ending November 30, 1632, there is a charge "for a dinner for the officers of the Mint when Bryott did work, it being no mint day." Then, later on, Sir Thomas Aylesbury delivered to the king "fair silver moneys," viz. three crowns and three half-crowns of Bryott's moneys, and three crowns, three half-crowns, and ten shillings of the moneyer's making, in all 55s. During the same twelve months, the French graver made 26 lbs. 11 ozs. of crown gold coins at 2s. 5d. the lb., and 221 lbs. 4 ozs. of silver coins at 8d. the lb., the total cost of his work being £15 2s. 3¼d. The corresponding figures from the moneyers were 2946 lbs. gold and 28,310 lbs. silver.

Briot next made coins in the year ending July 31, 1639, when he struck 930 lbs. 1 oz. of silver moneys only, for which work he received £31 0s. 0½d. (Audit Office Accts. 1628/220-4).

The foregoing extracts prove that Briot worked at his own coinage on certain unnamed days within two stated periods only, viz. (1) between November 30, 1631, and the same date in 1632, when the mint-marks Rose and Harp were successively used, and (2) between July

31, 1638, and the same date in 1639, when the Anchor and the Triangle were the current marks, the latter being in use for about three weeks (*Num. Chron.*, 4th Series, Vol. X. p. 393).

Nicholas Briot.

By the resignation of John Gilbert the path was left open for Briot, who was granted on January 22, 1633-4, the office of "one of the chief gravers," with an annuity of £50 from Christmas, 1632, during good pleasure. Thus he became at last officially attached to the Mint, but the appointment was not a joint one with Edward Greene.

On the next day, January 23, 1633-4, another patent conferred the post of under-graver upon John East, for life, in succession to Charles Greene, then recently deceased.

There was no further change in the position until the year 1641, when I find that Nicholas Burgh, a graver, was employed at the Tower, by reason of the great quantity of bullion brought in, for $46\frac{1}{2}$ days ending on November 27 of that year, at 5s. the day. John Decroso was also assisting for 12 days only. Abraham Preston, a third graver, was similarly engaged for 235 days ending on November 5, 1642. The aggregate sum paid to these three men was £97 2s. 6d. We have some evidence that Briot's appliances were used in 1642, as there is a payment in that year of £115 to Thomas Richardson, clothworker, for "eleven iron presses for coinage of moneys, and one great iron mortar and pestle" (*Audit Office Accts.*, 1599/42).

Between November, 1642, and March, 1642-3, Abraham Preston was again working for 24 days.

Burgh also reappeared and graved the coining irons on 306 days between September, 1643, and the same month in 1644, for which he was paid £76 10s. (Pipe Office Accts., 2186).

Any variations which appeared on the Tower dies of 1641 to 1644 might be due to the introduction of these supernumeraries, one of whom afterwards became a member of the staff.

Edward Greene died shortly before Christmas, 1644, to which day his salary was paid; he was succeeded by Nicholas Burgh, according to Pipe Office Account 2186. The name of John East still appears as under-graver.

Edward Wade and Thomas Simon.

If Burgh did succeed to the higher place he held it for about three months only, because Edward Wade and Thomas Simon were jointly appointed by letters patent on April 4, 1645, during the pleasure of Parliament.

In December, 1646, Briot died (*Num. Chron.*, 4th Series, Vol. X. p. 397). Edward Wade, too, was soon removed by death; his last fee was entered in the accounts at Christmas, 1648, when the word "late" was prefixed to his name (Audit Office, 1601/51).

Before quitting the complications of this disturbed period I must add a few lines as to that elusive person Thomas Rawlins.¹ The *Dict. Nat. Biography* tells us that

¹ St. Mary Woolnoth, London.
Baptism.

1618. 11 Oct. Thomas, son of Wm. Rawlins, goldsmith.

Having regard to the fact that the majority of the gravers were connected with the Goldsmiths' Company it is probable that this baptism refers to the Oxford artist, who, as the son of a goldsmith, may have been associated with such work from boyhood and may have inherited his father's skill.

he was formally appointed chief graver of the Mint in 23 Charles I, 1647-48, and other writers say that he was working at the Tower at varying dates. As far as the Tower is concerned there is no trace of any one bearing that name either before or after the political troubles began, and it is most improbable that Parliament would give any office to a pronounced royalist after November, 1642, when a receiver was appointed to annex the king's revenues at that Mint. Nevertheless, the tradition was, in one sense, founded on the truth. I have been so fortunate as to discover a small collection (as yet un-indexed) of warrants for letters patent and similar grants issued by Charles when his headquarters were at Oxford. These papers include one at least which is of value in this enquiry, and therefore it shall be quoted textually.

Thomas Rawlins.

"The office of cheife graver to his Ma^{ts} mints in the Towre of London and elsewhere in England and Wales, with the fee of 30^{li} p^r ann and all other p^rfitts belonging to that place, graunted to Thomas Rawlins gent for his life And alsoe the office priviledge and authority of sole makeing graving and cutting of all seales stamperes and escutcheons whatsoever wherein his Ma^{ts} royall ensignes of armes are to be engraven and all profitts thereunto belonging With co^mmand to all others not to intermeddle with any worke belonging to the said office of his Ma^{ts} cheife graver. Subscribed by M^r Sollic^r geⁿall by warr^t under his Ma^{ts} royall signe manuell. April 1645" (Privy Seal Warrants, &c., Vol. 7).

There is also a brief memorandum or abstract of the letters patent which passed the Great Seal on May 7 then next.

While it is clear that Rawlins's appointment to the "Tower of London" was only the assertion of a right which, under the existing circumstances, could not have been exercised by the grantee, there is a further point of interest in this warrant. To my mind, the unusually wide phraseology, "England and Wales," suggests that the Oxford graver was to make, as he probably had been making, the dies for the royalist mints, excepting York and Aberystwith, which had been established before the troubles became acute. There is, however, one other mint, viz. Exeter, which may have engaged a local or West-country artist for the graving of its dies, as can be inferred from a document to be presently cited.

The series of legal instruments drawn up when the king no longer controlled the central government also includes three commissions of some historical importance, two of which are not strictly germane to the subject now under discussion; but, seeing that we know so little about the inception of the Civil War mints, I will take the opportunity to record in the pages of the *Chronicle* the general terms of these instructions by Charles to his lieutenants in other parts of the Kingdom—

(1) A commission directed to Sir Richard Vyvyan, knt., giving him authority by himself or a deputy to erect one or more mints within the counties of Devon and Cornwall and the city of Exon, and to make and engrave irons and stamps with his Majesty's effigies inscriptions and arms, and therewith to imprint and instamp all ingot bullion and plate of gold or silver brought to him. The moneys so made and stamped to be of the same specie weight and goodness as are his Majesty's moneys in the Tower of London; Sir Richard to receive for his pains and charges the same allowances

as are paid in the said Tower, and to pay the money so made to Sir John Berkley, knt., or such other person as his Majesty may appoint. To continue during pleasure. 3 January, 19 Charles I, 1643-4.

(I wish that I could add the name of the graver employed at Exeter by Sir Richard Vyvyan, but at present it is not feasible.)

(2) A commission directed to Sir Thomas Cary, knt., authorizing him to erect one or more mints within the counties of Hereford, Worcester, Salop and Chester, and to coin moneys in such a manner as in the Tower of London, and to receive for his pains and charges such allowances as are paid in the Tower, without account. And to pay so much of the money as shall be made of ingot bullion or plate delivered to his Majesty's use, to Prince Rupert or such as he shall appoint. At Oxon, 22 May, 20 Charles I (1644).

(3) A commission for Edward, Lord Herbert, to erect and set up one or more mints for the coining of plate or bullion into the several sorts of gold and silver usually current within any of his Majesty's dominions.

At Bowe, 29 July, 20 Charles I (1644).

The three mandates are entered in Crown Office docquet book, No. 3, at the Public Record Office; the original docquets were deposited in the Ashmolean Museum in 1686 under a bequest by Sir Wm. Dugdale, and they are now in the keeping of the Bodleian library.

THE COMMONWEALTH AND THE PROTECTORATE.

Thomas Simon.

This period opens with the appointment of Thomas Simon as chief graver on April 25, 1649; John East was

still his assistant, and Nicholas Burgh was perhaps associated with the latter.

Who engraved the dies for the Commonwealth coinage? It is rather difficult to believe that the man who gave us Cromwell's coins, the Petition crown, and the finely chiselled portraits on the hammered money of Charles II, was also the designer of the "harp and cross" pieces of 1649. I think that in this case there was a departure from established usage, and that either East or Burgh prepared the irons in accordance with a sketch provided by the Parliamentary Committee for the Mint.

In February, 1649-50, there were undoubtedly complaints as to these coins. Also, an account exists of work done by Simon, but as it begins in 1650, and is silent as to the Commonwealth moneys, it does not help us to decide the question with any certainty. The remaining written evidence is very conflicting; an account by the master-worker, running from May, 1649, to November, 1653, mentions Burgh as being then "graver," and does not refer to Simon (Audit Office Accts., 1629/234). On the other hand, in the course of litigation in 1663 between Aaron Gourdain, the late master-worker, and some ejected Mint officers, the former states that East was "graver" from May, 1649, to December, 1651, when he was succeeded by Burgh, who remained in possession until November, 1657; again Simon is not mentioned (Exch: Commissions, 6313).

These apparent contradictions suggest that there was much overlapping in the duties to be performed, and strengthen the possibility that one or other of the juniors worked the Commonwealth dies. Be that as it may, John East's fee was not paid after Ladyday, 1652;

from that date the payment was made to Burgh as his successor.

Thomas Simon was confirmed in his office of sole chief graver by Oliver Cromwell, as Lord Protector, on July 9, 1656, at a salary of £30 from Ladyday, 1655, for life. He was authorized to make all badges, seals, &c., and to appoint a sufficient under-graver or deputy. The post of medal-maker was also conferred upon him by the same letters patent, with an additional annuity of £13 6s. 8d.

CHARLES II.

After the restoration of the monarchy on May 29, 1660, the king was confronted with an embarrassing situation in Mint affairs, as there were two persons then living who held patents for life to exercise the office of chief engraver at the Tower, viz. Thomas Rawlins by virtue of the royal grant from Charles I, and Thomas Simon by successive grants from Parliament and the Lord Protector. In the result, as will be seen, a compromise was effected and both artists were retained, but in different capacities.

Thomas Rawlins.

I will speak first of Rawlins. It is not at all easy to indicate the nature of his duties, or to define the extent to which he participated, if at all, in the cutting of the dies for the earliest issue of coins. I have been unable to learn that new letters patent or any other form of grant were issued to him after the Restoration, save only a Treasury note that he was to be reinstated in his place, and therefore we may infer that the Oxford patent of

1645 was regarded as being good and valid. There is, moreover, abundant proof in the Mint accounts that he was deemed to be "chief graver," and that he received the customary annual fee of £30 from the time of the king's return to England. The printed calendar of Domestic State Papers mentions, under June, 1660, a warrant to Parkhurst and others instructing them forthwith to cause Rawlins to engrave the dies with the royal effigies, but an inspection of the original document shows it to be only a draft, without signature or stamp, and without the day of the month. Consequently, this paper is of very little worth as evidence that Rawlins was the designer of the hammered moneys of Charles II, and it need not, I think, disturb our belief that the work was in fact executed by Simon.

The first regular appointment made in this reign was to the office of under-graver, which was given to a man whose name has hitherto been unnoticed, but who was employed at the Tower for at least seventeen years. A patent roll of 12 Charles II (part 36, No. 13) includes a grant to Thomas Astell of the office of under-graver of the irons for money, during his life; with an annuity of £40 from the time of the death of John East, deceased, as he had held it (June 22 (1660)).

Thomas Simon.

Turning now to Thomas Simon, he had been directed in August and September, 1660, to lay aside other work and prepare the coinage dies, and although he was presumably so engaged during several months, it was not until the summer of 1661 that his functions were precisely settled by letters patent. A grant was then made to him of the office of "one of the chief gravers of the

irons for money," with the right to cut and grave all signets, badges, seals, arms, and medals upon which the royal arms were to be engraved; to be held by himself, or by a sufficient deputy, for his life, with an annuity of £50, and the emoluments, diets, and profits as formerly held by Nicholas Briot, deceased (June 2, 13 Charles II (1661); Pat. Roll, part 12, No. 9).

John Roettier.

On May 19, 1662, two warrants were issued to John Roettier as "one of the chief gravers;" the first ordering him to make puncheons, &c., for coins to be struck by the mill and press, the second fixing his remuneration at £50 yearly, with a convenient dwelling-house (Dom. State Papers, Charles II, vol. 54). So, at that date the Mint was served by a chief graver and under-graver in ordinary, and by two supernumeraries each described as "chief," and receiving a higher rate of pay—an array of talent which did not make for peace in the Tower workshops. The cost of the rival methods of striking the currency is shown in two sets of working expenses, the moneyers being paid 18*d.* for the pound troy of milled silver, and 14*d.* for hammered silver. Five presses for coining cost £300 in 1670.

Thomas Simon died on an unknown day within the three months ending at Michaelmas, 1665, and it is said that he fell a victim to the Great Plague of that year. It is also not improbable that the Tower Mint suffered from the same visitation, as I find an item in the accounts to the effect that a watchman in the house of Mr. Woodward, the assay-master, was taken to the Pesthouse for the Tower Hamlets on July 11, 1665, and that the assay-master himself died shortly afterwards.

We have seen that only one member of the Roettier family was appointed in 1662, but seven years later John and his two brothers received an enlarged grant, the terms of which followed the words used in Briot's patent of 1628, as far as they were applicable. It will therefore be unnecessary to cite more than a brief abstract of the essential portions.

John, Joseph, and Philip Roettier.

The king having had long experience of the great skill and knowledge of John, Joseph, and Philip Roettier, brethren in the arts of graving and cutting in stone and also in divers other arts, and as they had at the king's desire quitted their native country and were willing to settle themselves in his kingdom and to employ their whole time in the said arts for the royal service, Therefore the king granted to them for their lives and the life of the survivor the right to make frame and engrave the designs and effigies of his image for all sorts of coins, together with medals representing his own or his consort's effigies, and that no one else should do so; and to have in their sole keeping all engines and instruments. And the said Roettiers were to receive for the execution of the office of making the first designs of the king's effigies the yearly sum of £450, and after the decease of one the survivors were to receive £350, and after the decease of two the survivor was to be paid £250. To take effect from Christmas, 19 Charles II (1667). Dated July 3, 21 Charles II (1669), Pat. Roll, Part 1.

Thomas Rawlins died in the early part of 1670, but his post was left vacant, and Thomas Astell continued alone as under-graver in ordinary.

There was a grant on January 11, 1670-1, to Henry

Harris of the office of chief graver of signets, seals, arms, &c., during the king's good pleasure. This would appear to be a direct encroachment upon the privileges of the Roettier family. In any event, I cannot trace Harris as being concerned with coinage matters at this time, and the same should be said of George Bowers, the medallist, who was appointed to be "embosser" in 1664.

JAMES II.

John Roettier was probably the sole designer of the coins during this short reign, as the Mint accounts tell us that he alone received the annual fee under the letters patent of 1669. His two brothers had then apparently returned to the Continent, and there is no mention of any other person. It may be, however, that John was unofficially assisted by his sons James and Norbert Roettier, as the latter afterwards put forward a statement that they had been employed at the Mint under Charles II and James II.

HENRY SYMONDS.

MISCELLANEA.

HELENA N. F.—M. Jules Maurice has written an interesting commentary on the recent article in the *Numismatic Chronicle* wherein I ventured to differ from his attribution of the coins inscribed Helena N. F. to Helena, the wife of Crispus. He says—

"I have read with great interest your article on Helena N. F., and you have shaken my convictions.

"Nevertheless, I still find the head of young Helena much younger, I still see in the existence of a Constantia N. F. and of Helena N. F. a connexion, and I still ask

myself if Constantine had some coins of his mother struck before he crowned her Empress. It is certainly a much less honour. Finally, Fausta is described in books, notably in Julian, as *Nobilissima Femina*; but St. Helena is never so described. St. Helena was repudiated by Constance Chlore. Her reinstatement could only come from her crowning, as Theophanes points out. These commemorative medals were probably struck afterwards with those of Theodora, but only afterwards. All these reasons still leave me somewhat in doubt.

"Further, why are the coins of St. Helena only struck in the port of Thessalonica, where Crispus was preparing his fleet for the war in the East in that year, 323-324? It is not proved that these coins were struck elsewhere."

His final point is certainly an effective one, and I am inclined to go even further than he does, and say that the fabric of the coins shows, almost beyond doubt, that the unmarked specimens are from the mint of Thessalonica. If this corroborated the other facts available it would be very important, but if it contradicts, then it does not seem weighty enough to overcome them.

Did the coinage of Helena N. F. stand alone, its issue at Thessalonica would be very significant. It is, however, difficult to believe that Crispus made himself responsible for an issue in honour of his wife *and his step-mother*, the reigning Empress. Such extraordinary conduct would almost have given colour to the scandalous allegations which were afterwards made against him, and would probably have been recorded by Constantine and his apologists.

I submit that no real difficulties arise from the other points raised by M. Maurice. St. Helena, because she had been repudiated by Chlorus when he became Caesar in 292 A.D., sank into obscurity, from which she was only raised by her son Constantine, when he found himself firmly seated on the throne.

M. Maurice admits that the first numismatic honour which he accorded to his wife, the reigning Augusta, was by coins bearing the title N. F. Why should he not also do so to his mother, who had not then reached the Augustan dignity, and why should he not have reinstated her in honour as *Nobilissima Femina* before he raised her to the higher rank? It was the usual course for those who were designated for the Imperial throne to bear first the title of *Nobilissimus Caesar* and then that of *Augustus*. It may even be that the N. F. series was the Emperor's first attempt to honour two ladies without offending either. Again, if Julian and other writers

had spoken of Helena the younger as *Nobilissima Femina*, and had not so designated St. Helena, that would have been evidence against me, but their silence as to both Helenas at least proves nothing. When it was desired years afterwards to honour Constantia, not then Augusta, what more likely than the revival of the N. F. series?

And I am still quite unable to accept the view that the portrait of Helena N. F. shows a younger face than those on the Augustan series. If further evidence than that afforded by Plate XXI. in the current *Numismatic Chronicle* is required, I would refer to the coins of Helena figured by M. Maurice in vol. iii. of *Numismatique Constantinienne*, Plates ii., vii., and xi.

P. H. WEBB.

THE BOULTON COPPER COINAGE.—The following letters formed part of a correspondence between Matthew Boulton and John Southern, F.R.S. (1758–1815), who was the most scientific member of the Soho staff. The originals are in the possession of the present writer. The proclamation authorizing the new coinage was published in the *London Gazette* for July 26, 1797. It was only then that the penny piece became a current coin; although, as is well known, copper penny tokens issued by private individuals were very common previously. The proclamation directs that the penny shall weigh one ounce; but nothing is said as to the size of the new coins, and it appears to have been Boulton's own idea to make the diameters of the coins serve as standards of length. The letters are eminently characteristic, and furnish a good illustration of Boulton's love of accuracy. As will be seen from the second letter, he took the trouble to obtain from the Royal Society a copy of the standard foot in order that the diameters of the coins might be quite exact.

Writing to Southern from London on May 19, 1797, Boulton says:—

“As I intend there shall be a coincidence between our Money, Weight and Measures by Makeing 8 two-peny pieces 1 lb or 7000 gr and to measure 1 foot; 16 peny pieces 1 lb, and 17 to measure 2 feet; 32 half-pence 1 lb, and 10 to measure 1 foot; 64 farthings 1 lb, and 12 to measure 1 foot, I therefore beg that Bush would turn an original Die & an original Coller of the peny size & Strike 17 blank pieces in them to see that 17 are an exact foot & if too long or too Short let them be adjusted untill the size is exact & then let those original dies & Collers be kept as an exact Standard

for the whole Coinage of pence. When that is adjusted then let the same be done for two-peny pieces (viz $1\frac{1}{2}$ inches) for unless they are turn^d perfectly exact to the same Standard my Gages will be of no use.

"I also wish you would tell Kellet that the thickness of the metal must be perfectly exact for if the Money is too light it will be returned upon my hands & if too heavy the loss of the Copper will fall upon me as they will be rated by tale.

"I will also thank you to tell Mr. Foreman that I am obliged by his letter & that I have dined with Col^l Fullerton. I hope you have not lost sight of the new Mint, for I am persuaded it will be far more compleat & harmonious than the present one, & the more I think of it the more I am pleased.

"I am glad to hear that the Founders are shaped into smooth Boreing.

"I have been with the Duke of Portland two hours today assisting & divising new Laws to prevent the Counterfeiting the Coin of this & all other Countries & have seen such a Collection of base money & base Arts as would astonish you & convinces me that all which Mr Colquhoun says in his Book is true.

"I am to present my Specimens to the Kg. on Monday next at Windsor but shall go on Sunday. I fear Bush is behind-hand with the air pumps, the Cranks & Counter or recoil pumps at the Mint."

Writing on May 28, 1797, Boulton says further:—

"I have obtained a Standard foot from one in y^e possession of the Roy^l Society & also a french foot which I have sent herewith pⁱ Coach.

"Sir George Shuckborow [Shuckburgh] is preparing to go before Parl^t with the subject of weights & measures but he will not be ready before next Sessions I have seen his apparatus which is accurate & expensive I will tell you y^e particulars when we meet being now in haste."

The concluding paragraph of the first letter has reference to the machinery for the new Royal Mint which Boulton was then constructing. The Mr. Colquhoun mentioned above is no doubt Patrick Colquhoun, author of *A Treatise on the Commerce and Police of the River Thames* (1800), and other works.

R. B. PROSSER.

XIV.

SOME CRETAN COINS.

(See Plate XV.)

THE coins illustrated in **Pl. XV.** are a selection from the cabinet of Captain J. S. Cameron of the Royal Sussex Regiment. They belong for the most part to the obscurer mints of Crete, but one or two of them have been chosen for publication as varieties of well-known issues, and the stater of Gortyna is an important addition to the series of that mint.

APOLLONIA.

1. *Obv.*—Head of Apollo r.; border of dots.

Rev.—Akrostolion; border of dots.

Æ. 13 mm. ↑ Wt. 25·3 grs. (1·64 grm.).
[**Pl. XV. 1.**] Cp. Svoronos, *Προσθήκαι*, Pl. xi. 6
(akrostolion and branch).

CHERSONESOS.

2. *Obv.*—Head of Athena r., in crested Corinthian helmet.

Rev.—Prow of galley l.; above, head of trident l.; on r.
X; border of dots.

Æ. 13 mm. ↑ Wt. 32·4 grs. (2·10 grms.).
[**Pl. XV. 2.**] Cp. Svoronos, Pl. iv. 8, where
the object above the prow seems to be a trident-
like monogram (instead of, as here, an undoubted
trident), and the mint-initial X is not visible.

3. *Obv.*—Head of Artemis or nymph r., hair tied in knot behind.

Rev.— - - ΝΑΣΙΩΝ Dolphin r.; below, trident r.

Æ. 16 mm. ↑ Wt. 65.9 grs. (4.27 grms.).
[Pl. XV. 3.] Obtained in Crete.

CYDONIA

4. *Obv.*—Head of nymph l.

Rev.—Kydon standing l., stringing bow; on r. downwards, ΚΥΔΩΝ, in field l., Α

Æ. 23 mm. ↓ Wt. 165.8 grs. (10.74 grms.).
[Pl. XV. 5.] A variety of Svoronos, Pl. ix. 15.
From the site of Polyrhenion.

5. *Obv.*—Dolphin r.

Rev.—Bitch seated l.; in field l., crescent (

Æ. 10 mm. ↑ Wt. 12.5 grs. (0.81 grm.).
[Pl. XV. 4.] From Western Crete.

6. *Obv.*—Male head r. (Hermes).

Rev.—Dolphin r.; below, ΥΔ

Æ. 11 mm. ↓ Wt. 15.7 grs. (1.02 grm.).
[Pl. XV. 6.] Cp. Svoronos, Προσθηκαι, Pl. xi. 22.

GORTYNA.

7. *Obv.*—Europa riding r. on bull.

Rev.—Head of Hermes r., wearing winged petasos with narrow brim; in front, caduceus; inscription on r. upwards, - - VT 90Λ Dotted incuse circle.

Æ. 25 mm. ↙ Wt. 182.6 grs. (11.83 grms.).
[Pl. XV. 11.]

This extremely interesting coin furnishes in the Hermes head a new type for Gortyna, or at least for Gortynian silver. The obverse is from the same die as

the Naples and Paris specimens of the stater with the lion's scalp reverse published by Svoronos, p. 160, No. 25, Pl. xii. 35. The coin was actually restruck on a stater of that kind; for below the bull may be seen one corner of the old incuse square reverse, with some of the hairs of the scalp. It is more difficult to identify the traces of the old obverse, although they may be discerned. The head of Hermes is of very fine, severe style. The stater may be dated towards the end of the first period, before 430 B.C.

LATOS-ETERA (?).

8. *Obv.*—Bull's head facing.

Rev.—E in incuse square.

Æ. 9 mm. ↑ Wt. 5·7 grs. (0·37 gm.).
[Pl. XV. 7.] From Crete. Captain Cameron knows of another specimen having been obtained in the island. Cp. the coins attributed to Latos-Etera, Svoronos, Pl. xx. 23 ff.

HERACLEION (?).

9. *Obv.*—Head of Apollo r., radiate; border of dots.

Rev.—Eight-pointed star; border of large dots.

Æ. 18·5 mm. Wt. 42·8 grs. (2·77 grms.).
[Pl. XV. 8.] From Cnossos. This is of thin spread fabric, others, of thicker fabric, were also seen in Crete by Captain Cameron.

10. *Obv.*—Stern of vessel l., decorated with a round shield; above, N; border of dots.

Rev.—Eight-pointed star.

Æ. 13·5 mm. Wt. 31·7 grs. (2·05 grms.).
[Pl. XV. 9.] From Crete. Cp. Svoronos, pp. 150 f. and Pl. xvii. 4, 5. There appear to be traces of letters on the r. edge of the obverse; possibly the coin is overstruck.

It will be observed that the letter on the obverse is clearly N. The specimen described by Svoronos, however, seems to have Η, on which account he suggests Heracleion as the mint. The new coin throws doubt on the attribution. Whether Nos. 9 and 10 belong to the same mint may be doubted, in view of the fact that the star is so common a type. The N and the Η are so distinct that it does not seem possible to suppose that they are two forms of the same letter; otherwise we might regard them as attempts to represent the initial *digamma* of Axos.

HIERAPYTNA.

11. *Obv.*—Female head r.

Rev.—Palm-tree between Π A; border of dots.

Æ. 11.5 mm. → Wt. 22.3 grs. (1.45 gm.).
 [Pl. XV. 12.] Cp. Svoronos, Pl. xxii. 33.
 There can be no doubt about the reading of Captain Cameron's coin. Do those described by Svoronos on p. 252 really read Π A?

ITANOS.

12. *Obv.*—Sea-monster r., wielding trident.

Rev.—Star of eight large and eight small rays, in linear circle, in incuse circle.

Æ. 26 mm. Wt. 118.5 grs. (7.68 grms.).
 [Pl. XV. 10.] Varying in the details of the reverse from the specimens figured by Svoronos, Pl. xviii. 21 ff. The coin is badly worn, hence its low weight.

13. *Obv.*—Head of Athena l., in crested Athenian helmet.

Rev.—Eagle standing r., head reverted; above, IT

Æ. 13.5 mm. ↑ Wt. 31.4 grs. (2.03 grms.).
 [Pl. XV. 13.] Cp. the types of the silver given by Svoronos, Pl. xix. 17 ff. (with the eagle to l.).

LATOS.

14, 15. *Obv.*—Head of Artemis r., hair in coil (?).

Rev.—Hermes, nude, moving l., r. hand extended,
l. holding caduceus ; across field, Λ Α

Æ. 17 mm. ↑ Wt. 42·6 grs. (2·76 grms.).
[Pl. XV. 14.]

Æ. 15 mm. ↑ Wt. 65·9 grs. (4·27 grms.).
The Λ obliterated by oxide. [Pl. XV. 15.]

16. *Obv.*—Head of Artemis r., hair tied in knot at back.

Rev.—Hermes wearing short chiton, moving l., r.
hand extended, l. holding caduceus ; across
field, Λ Α

Æ. 13 mm. ↑ Wt. 26·0 grs. (1·69 grm.).
[Pl. XV. 16.]

LISOS (?).

17, 18. *Obv.*—The caps of the Dioscuri ; border of dots.

Rev.—Bow and quiver crossed, in field l., C ; border
of dots.

Æ. 16·5 mm. ↓ Wt. 45·5 grs. (2·95
grms.). [Pl. XV. 17.]

Æ. 15 mm. ↑ Wt. 35·6 grs. (2·31 grms.).

For the types, cp. Svoronos, Pl. xx. 37. But these
coins did not come from anywhere near the site of Lisos,
and may belong to some other mint.

LYTTOS.

19, 20. *Obv.*—Head of Zeus r., bearded, laureate ; border
of dots.

Rev.—Eagle standing r., flapping its wings ; inscrip-
tion, ΛΥΤΤΙΩΝ

Æ. 15 mm. ↑ Wt. 34·3 grs. (2·22
grms.). [Pl. XV. 18.]

Æ. 16·5 mm. ↑ Wt. 30·6 grs. (1·98
grm.). [Pl. XV. 19.]

The inscription is less clear than on the preceding, and the reverse shows traces of a laurel-wreath surrounding the type; but the coin was, perhaps, restruck on another, to which the wreath belongs.

Of these two coins, the former was obtained, in a much oxydized condition, near Chersonesos, for the sum of half a drachma; the latter also in Crete, but some years later. They appear to be from the same reverse die, and there is no doubt of their authenticity.

OLOUS.

21. *Obv.*—Head of Artemis Britomartis r, hair tied in knot behind; irregular border of dots.

Rev.—Zeus seated l., holding eagle in r., resting l. on sceptre; in field l., ☞; border of dots in incuse circle.

Æ. 16 mm. ← Wt. 41·7 grs. (2·70 grms.).
[Pl. XV. 20.]

ORION (?).

22. *Obv.*—Vase, with two neck handles (or deeply fluted neck) and a handle on the body.

Rev.—Incuse square of Aeginetic pattern; in one compartment, traces of a letter (?).

Æ. 13 mm. Wt. 19·4 grs. (1·26 gm.).
[Pl. XV. 21.] From the province of Monophatsi in Crete. Cp. Svoronos, p. 331, Nos. 3, 4, Pl. xxxi. 10.

Captain Cameron believes that the coin came from the village of Ini, and local tradition appears to attach the name of Inatos to the neighbouring ancient site. In one of the compartments of the reverse there is trace of what may have been a letter or monogram, or is perhaps merely a flaw.

The imitation of the Aeginetic reverse (as at Orchomenos in Boeotia) is of great interest. The very speculative attribution to Orion is suggested by Svoronos for the other coins with the same vase because the dolphin (which they have as reverse type instead of the Aeginetic reverse of our specimen) closely resembles that on another Cretan silver coin which is inscribed OP

PHIAESTUS.

23. *Obv.*—Talos, winged, running l.

Rev.—Palm-tree between Φ A Incuse circle.

Æ. 11·5 mm. ↑ Wt. 12·2 grs. (0·79 grm.).
[Pl. XV. 22.]

ROMAN PROVINCE.

24. *Obv.*— - - ΣΕΒΑ · ΓΕΡΜΑΝΙ Head of Nero r.

Rev.—Zeus, with himation round waist and over l. shoulder, standing to front, holding thunder-bolt in r., resting l. on sceptre; at his feet, eagle; around the field, the seven stars of the Great Bear; border of dots.

Æ. 23·5 mm. ↓ Wt. 129·7 grs. (8·40 grms.).
[Pl. XV. 23.] Cp. Svoronos, Pl. xxxii. 21.

PERGAMENE COINS COUNTERSTRUCK.

25, 26. *Obv.*—Head of Athena r., in crested Athenian helmet.

Rev.—[Coiled serpent and inscription ΦΙΛΕ ΤΑΙΡΟΥ.
This type is more or less obliterated by a large countermark representing a] male figure moving l., holding a flower (?) in his extended r. hand; border of dots.

Æ. 16 mm. Wt. 45·4 grs. (2·94 grms.).
ΑΕΤΑ legible. [Pl. XV. 24.]

Æ. 17 mm. Wt. 48·3 grs. (3·13 grms.).
ΑΕΤΑΙ legible. [Pl. XV. 25.]

These two coins came from Eastern Crete, probably near Ayios Nikola (Gulf of Mirabello). Svoronos figures the reverse of another among the *Uncertain of Crete* (p. 332, No. 13, Pl. xxxi. 22). The obverse of that specimen seems to have been entirely obliterated in countermarking, since he describes it as having no type. Captain Cameron has two others, one, perhaps both, of which were, like Nos. 25 and 26, struck on coins of Pergamum, similar to those described by Wroth, in *B. M. C.: Mysia*, p. 121, Nos. 75 ff., or by H. von Fritze, *Münzen von Pergamon*, Taf. I. 28. Among the coins seen by Captain Cameron in Crete were four of that very class. They are dated by von Fritze (p. 23) to the middle of the second century B.C. Cretan mercenaries were in great demand in the wars of that period,¹ and it is probable that those who served under the Attalids would bring back Pergamene money with them. Otherwise it is unlikely that such insignificant bronze coins would find their way so far afield in the ordinary course of trade.

J. S. CAMERON.

G. F. HILL.

¹ Niese remarks (*Gesch. d. griech. u. maked. Staaten*, III. p. 68) that when Eumenes II made alliance in 184 or 183 B.C. with thirty-one federated Cretan cities, he was doubtless reckoning on the opportunity this alliance would provide of getting Cretan soldiers into his service. Cp. also Niese, pp. 321 ff. Captain Cameron makes the suggestion that the type of the countermark may be a debased copy of the Hermes who appears on some coins of Latos (*e.g.* Svoronos, Pl. xx. 20); Latos was one of the cities which made an alliance with Eumenes.

XV.

COUNTERMARKED COINS OF ASIA MINOR.

A HOARD of copper coins of Kyme which I obtained recently from Smyrna suggests some interesting problems with regard to the use of countermarks as exemplified by some of the coins present in the hoard. The following is a summary description of the hoard, giving in the case of each specimen the size (in millimetres), weight (in grammes), and position of the reverse die relatively to the obverse.

Obv.—Eagle r.

Rev.—Vase ; in field, Κ Υ [Series, *B. M. C.*, 16–20.]

1. 10 mm. 1·00 grm. →

Obv.—Eagle r. ; on l., magistrate's name upwards, roughly parallel to back of eagle.

Rev.—Vase ; in field, Κ Υ ; sometimes monogram below.
[Series, *B. M. C.*, 27–39.]

2. ANTIKPATH[Σ	: P	13 mm.	2·00 grms.	←
3. ΕΡΜΗΣΙΛΑΣ	: no monogr.	15 „	1·84 „	↑
4. ΛΑΧΑΡΗΣ	: †	14 „	2·19 „	↑
5. ΜΕΓΙΣΤΑΓΟΡΑΣ	: ΕΥ (?)	14 „	1·28 „	↘

Obv.—Forepart of horse r.; above on l., KY; below, magistrate's name.

Rev.—Vase; in field l., monogram [Series, *B. M. C.*, 40–52.]

6. ΑΤΤΙΝΑΣ	:	17 mm.	2·83 grms.	↖
7. ΔΙΟΝΥΣΙΟΣ	:	16 „	2·62 „	↖
8. ΔΙΟΝΥΣΙΟΣ	:	17 „	3·83 „	↑
9. ΕΠΑΡΙΤΟΣ	:	16 „	3·07 „	↑
10. ΕΠΙΚΡΑΤΗΣ	:	16 „	3·26 „	↘
11. „	:	17 „	3·91 „	↘
12. ΛΑΧΑΡΗΣ	:	17 „	4·14 „	↑
13. „	:	17 „	3·19 „	↖
14. ΞΕΝΟΤΙΜΟΣ	:	17 „	3·12 „	↑
15. ΠΑΡΜΕΝΙΤΗΣ	:	17 „	4·11 „	↑
16. ΤΑΝΥΣΙΠΠΟΣ	:	15 „	4·23 „	↑
17.]ΡΑΤΗΣ	:	16 „	2·82 „	↓
18.]ΥΣΙΠΠΟΣ	:	17 „	3·57 „	↖
19. ?	:	16 „	3·59 „	↑
20. ?	:	15 „	3·47 „	↖

Obv.—Female head r.

Rev.—Vase; in field, KY; below, magistrate's name.

[Series, *B. M. C.*, 53.]

21. ΗΡΑΙΟΣ	12 mm.	0·96 grm.	↑
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Obv.—Female head r.

Rev.—Forepart of horse r.; above, KY; to l., vase; below, magistrate's name. [Series, *B. M. C.*, 54–57.]

22. ΑΡΙΣΤΟΜΑΧΟΣ	14 mm.	3·35 grms.	↑
23. „	15 „	2·93 „	↑
24. ΛΕΣΒΙΟΣ	14 „	3·81 „	↖
25. „	14 „	4·03 „	↑
26. „	15 „	2·16 „	↓
27. „	14 „	2·95 „	↑
28. „	14 „	2·24 „	↑

Obv.—Female head r.

Rev.—Horse r.; above, KY, in front, vase; in exergue, magistrate's name. [Series, *B. M. C.*, 59–72.]

		mm.	grms.		
29.	ΑΡΙΣΤΟΦΑΝΗΣ, in place of vase, ΗΡ (?)	22	6.94	↑	{ cmk. on obv. bust of Artemis r.
30.	ΛΑΟΝΙΚΟΣ; below horse, Ρ	21	7.08	↑	„
31.	„ „ „	21	8.74	↗	„
32.	„ „ ΜΕ	20	7.35	↑	„
33.	„ „	19	6.63	↑	„
34.	„ „ Δ	20	8.05	↑	„
35.	„ „ „	21	7.11	↑	„
36.	„ „ „	20	7.92	↑	„
37.	ΠΥΘΑΣ (ΚΥΜΑΙΩΝ above)	22	8.72	↑	„
38.	ΠΥΘΙΩΝ	20	6.15	↑	„
39.	„	23	6.16	↗	„
40.	ΤΙΜΗΣΙΛΑΟΣ; in place of vase, ΗΡ	21	7.54	↑	„
41.	?	20	6.45	↑	„
42.	?	19	5.43	↖	„
43.	?	21	8.33	↑	„

Obv.—Bust of Artemis r.

Rev.—Vase between branches of laurel; above, KY; in field, magistrate's name. [Series, *B. M. C.*, 87–92.]

44.	$\begin{array}{c} \text{I} \Omega \\ \text{I} \Lambda \\ \text{O} \Sigma \end{array}$	16 mm.	4.07 grms.	↑
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Obv.—Artemis standing r., clasping hand of Amazon standing l.

Rev.—Quadrige r.; in it, two figures.

45.	17 mm.	2.68 grms.	↑
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It will be observed that the countermarked coins in this hoard belong entirely to one series; and coins of this series similarly countermarked with the bust of Artemis are not uncommon. For instance, there are

two specimens in the *British Museum Catalogue* (Nos. 71 and 72), both bearing the name of Pythion; the Bibliothèque Nationale has three, on all of which the original magistrate's name is illegible; and there are three at Berlin, one of Pythion, the other two with names effaced. Another countermark occurs on coins of the same series in the form of the monogram AP : there is one example of this in the Bibliothèque Nationale, and another at Berlin, on neither of which can the magistrate's name be deciphered. (There is also in the Berlin Collection a coin of Pythas with an obscure countermark.)

The two countermarks used thus can be definitely connected with issues of copper coins at Kyme which, according to the classification of the *British Museum Catalogue*, are ascribed to the period immediately succeeding that of the series to which the countermarked coins belong; the bust of Artemis is the obverse type of some fairly common coins (*B. M. C.*, 87-92), and the monogram appears conspicuously on the reverse of another coin (*B. M. C.*, 83). There can be no doubt that the countermarking was done during the issue of these later series, and by the authorities responsible for the issue.

But it is by no means clear why these authorities should have countermarked coins of their own city, nor why, if they wished to do this, they should have selected for the purpose coins of one series only, and that the latest in point of date of previous issues. The earlier series are, so far as I have been able to discover, never countermarked with the marks under discussion.¹

¹ Imhoof-Blumer has published (*Z. f. N.*, xx. p. 277) a coin of the earlier series of Kyme with obverse eagle, reverse vase, which is countermarked with a star on the obverse and a bunch of grapes on the reverse; and I have a similar specimen with the same countermarks; but these countermarks cannot be connected with the city of Kyme.

Warwick Wroth suggested, in a note on the counter-marked examples in the British Museum (*B. M. C.*, p. 111), that the object of the countermark might be to give the coin currency with the later series. But it does not appear why it should have been necessary to countermark a coin for this purpose; it was not the usual custom of Greek states to demonetize their own old issues; in fact, in many places the gradual depreciation of the coinage seems to have led to a preference on the part of the public for the oldest coins available;² and, while a city might reasonably be expected to countermark the coins of another city in order to give them currency in its own territory (though even this was apparently regarded as superfluous, as counter-marked coins are comparatively rare, while uncounter-marked coins are commonly found elsewhere than in the dominions of the issuing state), it would seem to have been an absolute work of supererogation for a city to countermark its own coins in order to give them currency. Moreover, so far as can be concluded from the composition of the hoard under consideration, the uncountermarked coins circulated concurrently with countermarked ones of the same series.

The fact last mentioned appears also to weigh against the possible supposition that the series of coins to which the countermarked examples belong had for some reason fallen into disfavour. There is no obvious ground in the coins themselves to account for such disfavour; as

² This preference on the part of the public for old coins when the currency was depreciating is very marked in the composition of hoards found in Egypt; see my paper on the "Roman Coinage of Alexandria" in *Historical Studies (British School of Archaeology in Egypt)*, p. 32.

will be seen from the weights given, it is not the lightest examples, or those only which fall below an average weight, which are countermarked. It might indeed be suggested that the condition of most of the countermarked specimens would offer some excuse for requiring a kind of reauthorization by the city magistrates if they were to continue in circulation; they are so worn as to be almost illegible, and the name of the magistrate originally responsible for their issue is in most cases either entirely defaced, or only to be restored by comparison with other coins. But although this particular series seems to have stood the wear and tear of circulation worse than others, there are still difficulties in supposing that it was necessary for the defaced coins to be countermarked in order to secure their acceptance, having regard to the condition in which Greek copper coins are commonly found; a considerable proportion of the copper in circulation in ancient Greece must have been practically illegible, and probably was accepted, notwithstanding its condition, as readily as defaced coins are in Asia Minor at the present day.

The phenomenon of copper coins countermarked by the issuing city is not, however, peculiar to Kyme; other cities on the western coast of Asia Minor appear to have been moved with a desire to countermark a particular series of their own coins at some period. Thus, at Erythrae, a countermark of a star, presumably used by that city, is commonly found on coins of one series, and one series only (represented in the *British Museum Catalogue* by Nos. 84 to 87); one series of Klazomenae is countermarked with a head of Athene, examples of which are fairly frequent (*e.g.* *B. M. C.*, Nos. 87, 88, 89); and rarer instances of countermarking occur on a series

of Knidos stamped with the head of Aphrodite (*B. M. C.*, 87, 89). It would perhaps be easier to find an explanation for this practice if a date could be assigned for the use of the countermarks, and if that date were approximately the same in the case of every city; but, while the countermarking at Kyme seems to fall probably about 190 B.C., and the same date might apply at Erythrae and Klazomenae, the series of Knidos on which the countermarks occur is not supposed to have been issued in the first instance till the first century B.C. Under the circumstances, I do not feel able at present to carry the solution of the problem further.

It is possible to arrive at a more definite conclusion with regard to the reason for countermarking in connexion with another hoard of copper coins, of the types of Alexander the Great, which I got from Smyrna, but have good authority for believing to have been found at Ephesus. The coins in this hoard are as follows:—

Obv.—Youthful head of Herakles r.; border of dots.

Rev.—Above, bow and quiver; below, club l.; between, ΑΛΕΞΑΝΔΡΟΥ; sometimes mint-mark.

1. No mint-mark	17 mm.	←
2. „	17 „	↑
3. Below, Π	17 „	→

Obv.—As last.

Rev.—Above, club r.; below, bow in case l.; between, ΑΛΕΞΑΝΔΡΟΥ; varying mint-mark.

4. Below, Ε	18 mm.	↘
5. Above, bunch of grapes and ☉	19 „	→
6. „ „ „ Α	18 „	↘

Obv.—As last.

Rev.—Above, bow in case l.; below, club r.; between,
ΑΛΕΞΑΝΔΡΟΥ; varying mint-mark.

7. Below, ear of corn l.	17 mm.	→
8. " " "	18 "	→
9. " " "	18 "	→
10. " " "	17 "	→
11. Below, ⌘	18 "	→
12. Above, ☉ (?)	19 "	↓
13. Below, M	18 "	→
14. " A	18 "	↑
15. " □ (?)	17 "	←
16. " ?	17 "	↑

Obv.—As last.

Rev.—Above, bow in case l.; below, club r.; between,
ΒΑΣΙΛΕΩΣ, varying mint-mark.

17. Below, race torch l.	21 mm.	→
18. " " "	20 "	→
19. " " "	19 "	→
20. " grasshopper (?) l.	19 "	←

The last four coins are countermarked on the reverse with a lion's head right.

Greek copper coins are hardly ever found in quantity far from the place of their mintage. Single specimens may, and do frequently, occur sporadically in almost any part of the Greek world without any obvious relation to the spot where they originated. But, as a general rule, even a small hoard of the issues of a particular town would not be discovered outside the immediate vicinity of that town; and the countermarked coins in the hoard under discussion practically fall into the category of an issue. The presence of these four similarly countermarked coins thus gives a fair ground for supposing that

the countermarking was done at or near the place where the hoard was obtained, which, if my information is correct, was Ephesus.³

The countermarked coins in this hoard are only those struck with the simple title ΒΑΣΙΛΕΩΣ, which are generally accepted as having been issued during the struggle for supremacy among the Diadochi, and probably before any of them had assumed the title of King. None of those with the name of Alexander are similarly treated; which suggests that whoever was responsible for the countermarking regarded the name of Alexander as sufficient to secure the circulation of these coins, but thought it desirable to give an additional authorization for those which bore no name by adding his own countermark.

If, then, the coins in question were countermarked at Ephesus shortly after 306 B.C.—and, as the four specimens are all in excellent preservation, they cannot have been long in circulation—it seems most natural to refer the countermark of a lion's head to Lysimachus, and to suppose that the countermarking was done either during his short occupation of Ephesus in 302 B.C. or, more probably, during his longer mastery of the town which lasted with one or two interruptions from 295 to 280. The countermarking of the nameless coins, while those of Alexander were left untouched, would be in accordance with the position of Lysimachus; and the lion's head would be a convenient abbreviation, for the restricted field of a countermark, of his familiar badge.

³ I have a coin bearing the same countermark of a lion's head and of identical types with Nos. 17-19 which I obtained among a number of coins from Cyprus. But the occurrence in Cyprus of an isolated example of the countermark is no guide as to the place where it was struck; and the same lot contained a few specimens of coins of Ionian cities.

I have to express my obligations to Mr. E. D. Barff of Smyrna, through whom I heard of and obtained the two hoards; to M. Babelon, for facilities granted me in examining the coins in the Bibliothèque Nationale; and to Dr. Regling, for kindly answering inquiries with reference to the coins of Kyme at Berlin.

J. G. MILNE.

XVI.

EPIGRAPHICAL DATA FOR THE ARRANGEMENT OF THE COIN-TYPES OF WILLIAM II, HENRY I, AND STEPHEN.

(See Plates XVI.—XIX.)

THE coinage of the Norman kings of England has not up to the present been examined from the point of view of the lettering, or rather, the punches from which the inscriptions were made. This subject has been so successfully exploited in the issues of later reigns¹ that it seems not unreasonable to expect that it may also be possible by this means to throw some light on the difficult question of the chronological order of the coin-types of this earlier period.

As the types of William I and the first two types of William II (Hks. 244 and 246) have already been arranged on the evidence of finds, mules, and over-strikes, almost, I venture to think, beyond possibility of doubt,² it is from this point that I shall now commence my investigations; for this purpose I must first show to what conclusions we are brought by the

¹ See Mr. Shirley Fox's article on "Die-making in the Twelfth Century," in *Brit. Num. Journ.*, vol. vi. pp. 191-196; and "Edward I, II, and III," by Messrs. Fox, in *op. cit.*, vols. vi and following.

² See Mr. Carlyon-Britton's articles in *Brit. Num. Journ.*, vols. ii. and following.

evidence that is at present to be got from finds and mules.³

The following finds⁴ contained coins of William II and Henry I:—

SHILLINGTON,⁵ 1871; four types of William II, omitting only Hks. 248; of Henry I, 4 or 5 coins of the “Quatrefoil and Pyramids” type (Hks. 252).

BERMONDSEY,⁶ 1820; of William II, 3 coins of Hks. 246 and 5 of Hks. 250; of Henry I, 5 coins of “Annulets” type (Hks. 251).

The following contained coins of Henry I only:—

BARI,⁷ *circa* 1891; 3 coins of the “Annulets and Pyramids” type (Hks. 257) and 24 of the “Voided Cross and Fleurs” type (Hks. 267).

CANTERBURY,⁸ *circa* 1901; 3 coins of the “Full face—Cross fleury” type (Hks. iv.), 1 of the “Lozenge fleury enclosing Star” type (Hks. 265), 1 mule $\frac{\text{Hks. 265}}{\text{Hks. 262}}$, 353 of the “Pellets in Quatrefoil” type (Hks. 262).

LOWESTOFT,⁹ 1905; 6 coins of the “Pellets in Quatrefoil” type (Hks. 262) and 6 of the “Quadrilateral on Cross Fleury” type (Hks. 255).

³ The only overstrike known of this period is that of William II, mentioned below, p. 403.

⁴ The number of coins given in each find is the number given in the description of the hoard; it must be remembered that it is only in very few cases that the complete hoard has been examined and described; references to the original descriptions are given and fuller details may be got from them. I here omit mention of Scottish, Irish, and foreign coins and of English coins that are not of regular types (*e.g.* baronial coins of Stephen, &c.), as they do not affect my present purpose.

⁵ *Num. Chron.*, 1871, p. 227.

⁶ *Ibid.*, 1846, p. 170.

⁷ *Ibid.*, 1892, p. 83.

⁸ Not published. These details are taken from private notes kindly lent me by Mr. Carlyon-Britton. The place of the find is not certain, but it is supposed to have been Canterbury.

⁹ *Num. Chron.*, 1905, p. 112.

BATTLE,¹⁰ *circa* 1860 ; 1 coin of the " Full face—Cross fleury " type (Hks. iv.), 1 of the " Double inscription " type (Hks. 258), 10 of Hks. 255.

The following contained coins of Henry I and Stephen :—

WATFORD,¹¹ 1818 ; of Henry I, 58 coins of Hks. 262 and 419 of Hks. 255 ; of Stephen, 643 coins of the " Watford " type (Hks. 270).

DARTFORD,¹² 1825 ; of Henry I, 4 coins of Hks. 255 ; of Stephen, an uncertain number of Hks. 270.

NOTTINGHAM,¹³ 1880 ; of Henry I, 7 coins of Hks. 255, also 1 of Hks. 251, and 1 of Hks. iv. ; of Stephen, 45 of Hks. 270.

SHELDON,¹⁴ 1867 ; of Henry I, 3 coins of Hks. 255 ; of Stephen, 65 of Hks. 270, and 2 mules $\frac{\text{Hks. 270}}{\text{Hks. 269}}$.

LINTON,¹⁵ 1883 ; of Henry I, 3 coins of Hks. 255 ; of Stephen, 40 of Hks. 270 and 39 of Hks. 269 (" Cross voided and Mullets " type).

The following contained coins of Stephen only :—

BUTE,¹⁶ 1864 ; 3 coins of Hks. 270 and 24 of Hks. 269.

The following contained coins of Stephen and Henry II :—

AWBRIDGE,¹⁷ *circa* 1902, of Stephen, 31 coins of the " Awbridge " type (Hks. 268) ; of Henry II, 110 coins of the " Tealby " type.

¹⁰ *Num Chron.*, 1873, p. 175.

¹¹ *Ibid.*, 1850, p. 138. In *Archæologia*, vol. xxi. p. 539, are mentioned about 130 coins of the same three types, which are perhaps another portion of the same find.

¹² *Num. Chron.*, 1851, p. 186.

¹³ *Ibid.*, 1881, p. 37. Comparatively few coins described.

¹⁴ *Brit. Num Journ*, vol vii. p. 27.

¹⁵ *Num. Chron.*, 1883, p. 108.

¹⁶ *Ibid.*, 1865, p. 57.

¹⁷ *Ibid.*, 1905, p. 354.

From these finds the following conclusions may be drawn :—

Of William II's last three types there is no evidence, for in each of the two finds containing his coins and coins of his successor, the type which must for other reasons be placed last (Hks. 248) is missing.

Of Henry I, either Hks. 252 ("Quatrefoil and Pyramids") or Hks. 251 ("Annulets") may be the first, as both are found with coins of William II.

Hks. 257 ("Annulets and Pyramids") and Hks. 267 ("Voided Cross and Fleurs") seem to be connected by the Bari find, but their position in the reign is uncertain.

The last type of the reign is clearly Hks. 255 ("Quatrefoil on Cross fleury") from the Dartford, Nottingham, and Sheldon finds; this is immediately preceded by Hks. 262 ("Pellets in Quatrefoil") from the Lowestoft and Watford finds; shortly before this probably come Hks. iv. ("Full face—Cross fleury"), Hks. 258 ("Double inscription"), and Hks. 265 ("Lozenge fleury enclosing Star"), but the coins of these types in the Canterbury and Battle finds are too few for any definite conclusion.

Of Stephen, Hks. 270 ("Watford" type) is shown to be the first type by the Watford and other finds connecting it with the coins of Henry I; next to this comes Hks. 269 ("Cross voided and Mulletts") from the Linton and Bute finds; the last type of the reign must be Hks. 268 ("Awbridge" type) from the Awbridge find.

The following are the Mules :—

William II, *Obv.*—Hks. 247. *Rev.*—Hks. 248.¹⁸
[Pl. XVI. 1.] (L. E. Bruun Coll.)

¹⁸ This mule was not known to me till after I had read a paper before

- Henry I, *Obv.*—Hks. 267. *Rev.*—Hks. 266. [Pl. XVI. 2.]
 (P. W. P. Carlyon-Britton Coll.)
 „ *Obv.*—Hks. 263. *Rev.*—Hks. iv. [Pl. XVI. 3.]
 (Hunterian Coll.)
 „ *Obv.*—Hks. 258. *Rev.*—Hks. iv. [Pl. XVI. 4.]
 (Hunterian Coll.)
 „ *Obv.*—Hks. 265. *Rev.*—Hks. 262. [Pl. XVI. 5.]
 (P. W. P. Carlyon-Britton Coll.)
 Stephen, *Obv.*—Hks. 270. *Rev.*—Hks. 269. [Pl. XVI. 6.]
 (Sheldon Find.)

The following overstrike places Hks. 250 before Hks. 247:—

A coin of William II, Hks. 247, reading + FOLIERDONÐTF, overstruck on a coin of Hks. 250 (British Museum).

By combining evidence of Finds, Mules, and Overstrike, we form the following groups (the numbers being those of *Hawkins*):—

WILLIAM II.

250—247—248.

HENRY I.

First type = 252 or 251.

257—267—266.

263—iv.—258 (probably late in the reign; cf. Canterbury and Battle finds).

265—262—255 (the last type of the reign).

STEPHEN.

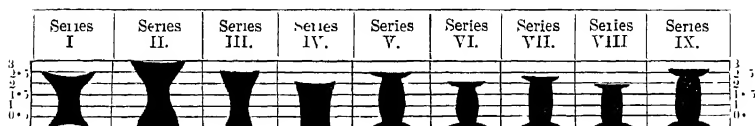
270 (first type)—269.

Last type = 268.

the Society, in which, for epigraphical reasons, I suggested that Hks. 247 should immediately precede Hks. 248. The mule was not originally the basis of my arrangement but a later confirmation of it. Nor was I at that time certain of the overstrike; others have since confirmed my opinion of it,

These groups fortunately form a sufficient framework to support the epigraphical material by means of which I shall endeavour to construct a sequence of the types down to the end of the reign of Stephen.

To make the subject as clear as possible I here append a table of drawings to show, in their order, the different forms of lettering which occur throughout this period; for this purpose the letter I, that is to say, the single upright punch, with serifs added where they occur, is the most convenient letter to reproduce. The letters are drawn to scale, three times their original size, and the horizontal lines, which mark half millimetres in the original, show clearly their relative sizes.



Series I. is in use throughout William II's first two types [Pl. XVI. 7]; it also occurs on some coins of Hks. 250 [Pl. XVI. 8]. Other coins of this type (Hks. 250) have the larger lettering of Series II. [Pl. XVI. 9], and on some coins both punches are seen in use together.

Series II. is also used throughout Hks. 247 with very rare exceptions; for example, Pl. XVI. 10 shows punches of Series II. throughout, with the exception of N and perhaps D in the mint-name, which are made from punches of Series III.; Fig. 11 is also of Series II. with smaller punches (Series I. or III. ?) for the first three letters, EDP, on the reverse. No coins of this type are known which are made of punches of Series III. only.

Series III. is used throughout Hks. 248, the last type of William II [Pl. XVI. 12; XVII. 1], and also throughout

the "Annulets" type of Henry I (Hks. 251) [Pl. XVII. 2], but is not found on any other type of this reign; this seems sufficient reason for accepting the evidence of the Bermondsey find, as opposed to that of the Shillington, in placing Hks. 251 as the first type of this reign.

It will be seen from the above table of punches (p. 404) that a line drawn between Series IV. and Series V. divides the forms of lettering into two very distinct classes. Down to the end of Series IV. the punches are always made with concave sides and serifs are never added; in and after Series V. serifs are always added by means of separate punches at the top and bottom of the upright punches¹⁹ (and also usually, though not invariably, at the ends of the horizontal punches); also from this point onwards the form of the punch is changed by its sides being convex instead of concave. Clearly, therefore, Series IV., the only remaining lettering of the early class, comes next in order to Series III. Series IV. occurs throughout the "Profile—Cross fleury" (Hks. 254), "Pax" (Hks. 253), and "Annulets and Pyramids" (Hks. 257) types; the punches vary on both types 254 and 253, from 2·0 to 1·6 millimetres [Pl. XVII. 3, 4], and on Hks. 257 they are usually slightly larger, 2·2–2·0 millimetres [Pl. XVII. 5]. Of these three types the last-mentioned (Hks. 257) is connected by the Bari find with Hks. 267 ("Voided Cross and Fleurs" type), of which the lettering is of Series V.; this type (Hks. 257) should therefore be the last of the three of Series IV., a conclusion which is supported by the forms used for the letters H, A, and V. On all previous types, including Hks. 254 and 253, the Roman H (H-I) has been the only

¹⁹ Exceptions are very rare indeed. A Chichester coin of Hks. iv. in the British Museum has no serifs in either inscription.

one in use, and A and V have been composed simply of two upright punches (⅃ ⅃), with the exception of the A in Pax (𐌰) on Hks. 253; but on Hks. 257, and on every subsequent type the English form (⅃D) is used, also different punches are used to form more correctly the letters A and V (𐌰, 𐌱). Having thus fixed Hks. 257 as the last of the three types of Series IV., we are left with the other two, Hks. 254 and 253, as the second and third types of the reign. Which of the two precedes the other I can find no evidence to show, unless perhaps we can deduce from the new form of A (𐌰) occurring in PAX, that Hks. 254 is the later; but, on the other hand, this may be a conventional use, for on the "Pax" types of Harold I and William I the same form is used in the word PAX, though not then in use in the inscriptions.

As the "Voided Cross and Fleurs" type (Hks. 267) is connected by the Bari find with Hks. 257, which we have found to be the fourth type, and as Mr. Carlyon-Britton's mule again connects Hks. 266 ("Pointing Bust and Stars" type) with Hks. 267, we may assume Hks. 267 and 266 to be Henry I's fifth and sixth types respectively. The lettering of these types is Series V., the first of the new class with serifs and convex sides. Some coins of Hks. 267 are made with punches of a straighter, thinner form and rather higher (2·7 mm.) than the rest. These I take to be the earliest punches of the new class, as the more convex punches, which vary from 2·5 to 2·3 mm. in height, are those in use on Hks 266 [cf. Pl. XVII. 6, 7]; the same punches (Series V.) are also in use on Hks. 252, "Quatrefoil and Pyramids" [Pl. XVII. 8, 9], Hks. 256, "Larger Profile—Cross and Annulets" [Pl. XVII. 10], and Hks. 263, "Cross in Quatrefoil" [Pl. XVII. 11], and also on some coins of

Hks. iv., "Full face—Cross fleury," and Hks. 258, "Double inscription;" on these last two types the remaining coins have punches of Series VI. Placing these two types (Hks. iv. and 258), which combine punches of Series V. and VI., later than the types with punches of Series V. only, we have Hks. 252, 256, and 263 to follow after the sixth type (Hks 266); of these Hks. 263 is connected by a mule with Hks. iv., and therefore seems to be the last of the three, *i.e.* the ninth type; which of the other two (Hks. 252 and 256) is the earlier seems to me quite uncertain. The Shillington find, as we said above, contained coins of Hks. 252 with coins of William II, but that this is, so to speak, a "compound" find—a hoard, that is, in which a period elapsed between its original composition and its completion before burial—is shown by the fact that this type (Hks. 252) has lettering of the new class with serifs, and therefore must be preceded by the four non-serif types of Henry I, not to speak of Hks. 267 and 266, which have also been shown to precede it; unless we can suppose, as I hardly think, that these numerous intervening types were represented among the many coins of this find that were not described.

I have already mentioned that the "Full face—Cross fleury" (Hks. iv.) and "Double inscription" (Hks. 258) types contain coins of both Series V. and VI.; on some coins also of each type these two styles of lettering are mixed. These two types are therefore the latest of Series V. and earliest of Series VI. **Pl. XVII. 12** and **Pl. XVIII. 1** are both coins of Hks. iv. with punches of Series V.; and **Pl. XVIII. 2** is a coin of the same type with the smaller, neater lettering (2·1–2·0 mm.) of Series VI. On **Pl. XVIII. 3** and **4** are coins of Hks. 258 with

lettering of Series V. in the outer inscription of the reverse, and of Series VI. in the obverse inscription and the inner of the reverse. The reverse of Hks. iv. is muled with obverses of both Hks. 263, the ninth type, and Hks. 258; I therefore place it between the two types with which it is muled, thus making it the tenth type and Hks. 258 the eleventh.

Punches of Series VI. are also used throughout the "Smaller Profile—Cross and Annulets" (Hks. 264) and "Star in Lozenge Fleury" (Hks. 265) types [Pl. XVIII. 5, 6, 7], and also on some coins of Hks. 262, which we have seen above (p. 402) must be the fourteenth type of the reign [Pl. XVIII. 8]. As Hks. 265 is connected with Hks. 262 by Mr. Carlyon-Britton's mule, and must therefore be the thirteenth type, the other type on which punches of Series VI. alone are used, Hks. 264, immediately precedes Hks. 265 and is the twelfth type of the reign.

The lettering of Series VII., which is slightly larger (2·3 mm.) and somewhat straighter—that is, less convex in shape—is used on some coins of the "Pellets in Quatrefoil" (Hks. 262) type, the other coins of this type being, as we saw above, of Series VI. (cf. on Pl. XVIII. No. 8 of Series VI. with No. 9 of Series VII.). Series VII. is also used throughout the "Quadrilateral on Cross fleury" (Hks. 255) type, which we have seen (p. 402) to be the last, or fifteenth, of Henry I [Pl. XVIII. 10].

Stephen's first type (Hks. 270) also has lettering of Series VII. [Pls. XVIII. 11 and XIX. 1] with the exception of obverse inscriptions where the form STIEFNE is used. For this purpose it seems that special punches were served out of a larger size (2·6–2·7 mm.) [Pl. XVIII. 12], which are found also, though very rarely, in obverse

inscriptions of coins of the next type (Hks. 269). The punches of Series VIII. were introduced during the issue of Hks. 270, as a coin in Mr. Roth's collection has this smaller lettering [Pl. XIX. 2], but I have not yet found it on any other coins of this type. The "Cross voided and Mullets" (Hks. 268) type, the second of the reign (see above, p. 402), has lettering of Series VII. on some coins [Pl. XIX. 3], and on the rest are found punches of Series VIII., a smaller lettering of 1.9–2.0 mm. [Pl. XIX. 4], which is used on all the coins I know of the "Cross and Fleurs" (Hks. 276) and "Lozenge Fleury and Annulets" (Hks. xix.) types [Pl. XIX. 5, 6], which may, therefore, from their epigraphical connexion with the second type of the reign, be placed immediately after it as Stephen's third and fourth types, though which of the two is the earlier I think it is at present impossible to say.

The type which I place next is one unknown to Hawkins, of which I only know two specimens, one in the British Museum from Hazlitt's sale, 1909, lot 1050 (the obverse is figured on Pl. XIX. 7*a*), and the other in Mr. Roth's collection (the reverse is figured on Pl. XIX. 7*b*). On Mr. Roth's specimen (the obverse is illegible) the reverse here figured has lettering of Series VIII., and the lettering on the British Museum specimen is of Series IX., the larger lettering (2.5–2.6 mm.) which is used on the remaining two types of the reign. As this type [Pl. XIX. 7*a*, 7*b*] thus forms the connecting link between Series VIII. and Series IX., I place it as the fifth of the reign. Of the remaining two types (Hks. xviii*b*. and 268), Hks. 268 has been shown to be the last type by the Awbridge find which connects it with Henry I's Tealby type; they both have lettering of

Series IX. [Pl. XIX. 8, 9, 10], which is also found on the "Tealby" coins of Henry I, which read *HENRI REX* on the obverse²⁰ [Pl. XIX. 11, 12]. The "Profile—Cross and Pyramids" (Hks. xviii. *b*) must therefore be Stephen's sixth type, and the "Awbridge" (Hks. 268) type his seventh and last.

It will be noticed that in each series the measurement of punches has been given to within one-fifth, or even one-tenth of a millimetre; that the punches could be made with such accuracy for such long use (usually a period of three or four types) shows that they were mechanically reproduced, as Messrs. Fox have proved to have been the case in the reigns of Edward I, II, and III. They were used, as one would naturally expect, till they were worn out, and then supplanted by a new set, as we see by the fact that the series of punches do not as a general rule coincide with issues of types,²¹ but come in gradually during the issue of one or two types in such a way that the types may be divided into "pure" types, or types on which one set of punches only is used, and "transitional" types, or types on which two sets, an old and a new, are seen, whereby the order of the series and thence of the types has been made possible. The consequent arrangement is shown in the following table, in which the types of William II, Henry I, and Stephen are set out in the order in which I have here

²⁰ The other "Tealby" coins (reading *HENRI REX ANGL*) have a smaller style of lettering, and I therefore suppose them to be the later coins of this type.

²¹ Series IV. and V. are the only exceptions in this period. Series IV. was evidently brought in because a coin of smaller diameter was required, and therefore smaller lettering (perhaps in the hope of making the clipping of coins more difficult); Series V. was necessary for the complete change in style which the coinage underwent at the introduction of Type V. (Hks. 267).

arranged them, and against each type are marked the styles of lettering found on the coins; the table shows clearly the "pure" and "transitional" types which I have just mentioned. Square brackets link together those types which are connected by finds,²² and curved brackets those which are connected by mules; this will serve to show the extent to which this epigraphical arrangement fits in with the order of the types so far as it can at present be determined from other sources.

	Series I.	Series II.	Series III.	Series IV.	Series V.	Series VI.	Series VII.	Series VIII.	Series IX.
[William II, Type I., Hks. 244	+								
" " II., " 246	+								
" " III., " 250	+	+							
" " IV., " 247		+	+						
" " V, " 248			+	+					
Henry I., Type I., Hks. 251			+	+					
" " II. or III., Hks. 254				+	+				
" " " 253				+	+				
" " IV., Hks. 257				+					
" " V, " 267					+				
" " VI, " 266					+	+			
" " VII or VIII., Hks. 252					+	+			
" " " 256					+	+			
" " IX., Hks. 263					+	+			
" " X., " iv.					+	+			
" " XI, " 258					+	+			
" " XII., " 264					+	+			
" " XIII., " 265					+	+			
" " XIV., " 262					+	+			
" " XV., " 255					+	+			
[Stephen. Type I., Hks. 270							+	+	
" " II, " 269							+	+	
" " III. or IV., Hks. 276							+	+	
" " " xix.							+	+	
" " V. (Pl. 7)							+	+	
" " VI., Hks. xviii. b							+	+	
" " VII., " 268							+	+	
[Henry II, "Tealby" type (HENRI REX)									+

²² I have only put square brackets to those types of which the connexion by finds is good evidence. I have not, for example, marked the first type of Henry I as connected with William II by the Bermondsey find, because its evidence might be said to be negatived by the Shillington find.

A further description in detail of the coins figured on the plates is unnecessary; the object of their illustration is to show the different lettering on different types. It only remains to say that they are all in the British Museum with the exception of **Pl. XVI. 1** (L. E. Bruun Coll.), **2** (P. W. P. Carlyon-Britton Coll.), **3** and **4** (Hunterian Coll.), **5** (P. W. P. Carlyon-Britton Coll.), **6** (Sheldon find; see *Brit. Num. Journ.*, vol. vii. p. 44 and pl. ii. 32), **Pl. XVII. 5** and **7** (Hunterian Coll.), **Pl. XVIII. 1** (P. W. P. Carlyon-Britton Coll.), **Pl. XIX. 2, 6,** and **7b** (B. Roth Coll.); and to thank Dr. George Macdonald, Keeper of the Hunterian Collection, Mr. Carlyon-Britton, Mr. Roth, and Mr. Bruun for their kindness in allowing me the use of their coins to illustrate this paper.

G. C. BROOKE.

XVII.

NOTES ON SOME ITALIAN MEDALS.

(Plate XX.)

FRANCESCO LOMELLINI, BY LODOVICO LEONI. In his third volume, p. 121, A. M. Armand has set up a medalist signing A. LVD. D., said to have been working about 1570. This signature is supposed to be found on a medal of Angelo Lomellini, which is described as follows: "Lomellini (Angelo), of Genoa, brother of Cardinal Benedetto¹ and of Francesco Lomellini. Diam. 68. AN. LOMELLINUS. DAVID. F(ilius) et B. CARD. F(rater) ÆT. AN. LXV.—A. LVD. D. Bust of Angelo Lomellini to right. *Rev.* IN. ROMA. The escutcheon of the Lomellini." The authority quoted is Avignone (Gaetano), *Medaglie dei Liguri e della Liguria*, 1872.

Reference should now be made to the description of a medal of the above-mentioned Francesco in Arm., I. 251, 2, under Lodovico Leoni. A good specimen of this piece in the British Museum (bronze, diam. 69) affords the key to the whole matter. This and the alleged Angelo medal are so exactly alike in every particular, with the exception of the name, FRAN for AN, and of DVRABO for IN ROMA on the reverse (as stated in the description),

¹ This Benedetto became a Cardinal in 1565 and died in 1579, and he is the subject of a medal by another artist, signing HN, recorded in Arm., I. 258 and III. 121, as of the year 1569, when his age was 52.

that an error is at once suspected, and so it proves to be. First with regard to the supposed signature A . LVD . D . The A is simply the well-known triangular stop, and the D is a misreading for L ., so that the signature of Lodovico Leoni remains. Then it will be found, by comparison with a less perfect specimen, that the two first letters of FRAN have dropped out in the casting, giving rise to the mistaken name of Angelo, while the words IN ROMA on the scroll are a misreading of VRA in the central part of DVRABO. The result, therefore, is that the medal of Angelo is as much a phantom as the signature, and that the whole description in III. 121, Δ, may be eliminated from the Catalogue.

DANTE (Arm., II. 11, 1), Diam. 56 [PL. XX. 1]. The reverse of this medal seems never to have been fully explained. The editors of the *Trésor (Méd. Ital., I. xiv. 3)* express their regret that, owing to the blurred condition of the medal before them, they are unable to give a more complete description of this very curious subject. On one side stands Dante, holding in his left hand the open book of the *Divina Commedia*, and extending his right arm as if in the act of addressing or reviewing the scene. Before him appears a towered rock which stands for the Mountain of Paradise. There is a winding road running round it, and an archway towards the top. On the summit are two figures described by Armand as "*deux personnages*," and by Friedlaender as "*zwei kleine Figuren unter einem Baume*." These, however, will be found to represent Adam and Eve, standing on either side of the Tree of Knowledge, round which the serpent is entwined. At the foot of this and an adjoining rock may be distinguished two caverns, entrances to the infernal regions,

with demons and nude human forms about them. Above are the seven circles of Heaven. Describing the performances of the Mysteries, in which Italy, and especially Florence, excelled, Burckhardt says, "In the public squares, in the churches, and in the cloisters, extensive scaffolds were constructed, the upper story of which served as a Paradise to open and shut at will, and the ground-floor often as a Hell, while between the two lay the stage properly so called, representing the scene of all the earthly events of the drama" (*Renaissance in Italy*, II. p. 184, Eng. Transl.). These shows reached their full development in the fifteenth century.

For the various sources of Dante's likeness Holford's *Portraits of Dante* (Medici Society) should be consulted, but the most important one is supplied by the well-known contemporary fresco by Giotto in the Bargello chapel (*circa* 1300). At a later date (1465) his picture in the Duomo at Florence was painted by Domenico di Michelino, under the order of the Signoria.² In this picture Dante stands facing the spectator, holding the open book as on the medal, between Inferno and portions of the city of Florence, having behind him the Mountain of Paradise and the heavenly circles.

The date of the bust at Naples seems to be uncertain, but it may have some connexion with the medal, at any rate in time.

It will be seen that on the medals the laurel wreath is strongly emphasized. Owing to his long banishment from Florence Dante was not crowned during his life, as he would not accept the ceremony in any but his native city.

² Cp. the early Florentine engraving (Hind, *Catal. of Early Italian Engravings*, A, I. † 23).

The introduction of printing into Florence in 1471 added to the popularity of his works, and it is to the last quarter of the fifteenth century that the date of the medals may probably be assigned (see Arm., I. 10, 28, and 29, as to the authorship of two other small medals, attributed by Friedlaender to Pisano).

The authorship of the larger medal and the question whether those of Petrarch and Boccaccio (corresponding more or less in size) are by the same hand, as suggested by Friedlaender, are matters for discussion. It is remarkable that fine examples of all the three should be so extremely rare.

The smaller medal (diam. 31) here illustrated in Pl. XX. 2 (it is believed) for the first time is described by Armand in III. 153, E, from this specimen.

LUCA GAURICO, of Naples (Arm., II. 164·6), b. 1475; Bishop of Civit  in 1545, died 1558. Instead of PANTHEVS after GAVRICVS the legend of the obverse should read NEAPOL . VATES . ENTHEVS (*divino instinctu afflatus*). This is a happier rendering for one destined for the episcopate than the name of a priest of Apollo. It appears that Gauricus practised some form of divination, at any rate in his earlier life. Having predicted to Giov. Bentivoglio his downfall at Bologna, the diviner was ordered to be swung backwards and forwards five times against a wall by a rope suspended from a tall winding staircase. This is related by P. Giovio. *Vates* in the legend probably means "seer" rather than "poet." He may not have been "inspired" in the latter sense.

LODOVICO DOMENICHI, of Piacenza, d. 1564. By Domenico Poggini (Arm., I. 255, 4). The medal (see

Pl. XX. 3) with its reverse, which represents a vase of flowers with lightning falling on it, is described at the beginning of Domenichi's own work on *Imprese*. The legend should read $\text{ANA}\Delta\text{E}\Delta\text{O}\text{TAI KAI OY KAIEI}$ ("A flame has burst forth and does not burn") instead of KYKAIEI (Armand). The reading is correctly given by Supino, *Il Medagliere Mediceo*, p. 148, No. 439. Heiss (II. 49) mentions that the reverse relates to the tortures Domenichi suffered from the Inquisitors at Florence; also that Giovio obtained his pardon. Domenichi himself explains the vase as representing human life, the flowers the virtues and graces given by Heaven, struck but not destroyed by his misfortunes.

VIRGINIA DI NEGRO (Arm., III. 295, I). Part of the legend should read A. P. A. after DICTA , instead of A. PA.— letters which remain to be interpreted.

RAEFAELLO MAFFEI, of Volterra (Arm., II. 52, 24), b. 1451, died 1512 (see Pl. XX. 4). On the reverse for OTON read OTONIA , the Latin name of Volterra, which forms the subject of the reverse. Diam. 39.

GIROLAMO CARDANO (Arm., II. 162, 21), physician and philosopher, of Milan, 1501, died 1576. A specimen is signed LEO under the shoulder, as the medal of Michael Angelo by Leone Leoni.

MARY OF AUSTRIA, wife of the Emperor Maximilian II (Arm., II. 237, 6). The figure on the reverse holds a crown and not a book (as queried). Diam. 65 instead of 63.

PIETRO ARETINO (Arm., II. 153, 11). An example in lead bears the date 1542 in relief under the shoulder.

HIPPOLITA GONZAGA, wife of Antonio Caraffa (Arm., I. 241, 1). The signature is in relief, not incised, and should read IAC . TREZ . instead of IA . TREZ . as stated in the description of the reverse.

GIANFRANCESCO MARTINIONI (Arm., II. 160, 11) for AET 37 (?) on the obverse read ANN . 27.

FRANCESCO ORDELAFFO (Arm , I. 43, 2). For MICH on reverse read MIHI.

JULIUS II (Arm., I. 104, 3). The letters S . P . Q . R . are inscribed on the shield to the right.

CARLO VISCONTI (Arm., II. 206, 15). The reverse represents a tree, nearly dead, nourished by its heart (" cor alit "); not " coral."

ANDREA RICCIO (Arm., I. 12, 1), 1470, died 1532. In connexion with this interesting medal three principal questions arise, (1) whether Riccio made it himself, (2) the date, and (3) the interpretation of the reverse.

With regard to the first, in the absence of a signature or any documentary evidence, the answer can only be conjectural and must be based on the character of the work itself. In the first place, there is the peculiarity of the legend on the obverse—Andreas . Crispus . Patavinus . Aereum . D . Ant . Candelabrum . F. One may almost think that this goes some way towards being tantamount to a signature. The medal then was designed to celebrate the great achievement of the artist's life, and the portrait is to perpetuate the features of the man who created it—Candelabrum Virumque—both together. The modest

but characteristic presentment of the portrait is that of a simple craftsman, leaving the reference to his work to speak for his credit. So far as is known Riccio was not a trained medallist in the professional sense, though he may have seen something of the process when he was a pupil of Bellano (d. *circa* 1492). Friedlaender (Vol. II. Tab. XIV.) places the latter's medal of Rosselli side by side with that of Riccio, apparently for the sake of comparison, and there is some similarity of style. It can hardly be doubted that Riccio was capable of producing the piece, and the technical defects are rather in favour of his authorship than otherwise. The way in which the legend is put in is not customary, and the lettering is irregular. There is also a leaf-like or floral ornament in a very unusual position in the field at the point where the legend begins and ends (see *Trésor*, II. xxxviii. 4). He may quite possibly have had a drawing of his portrait supplied by another hand for his model. The medal stands alone, so that there is no evidence from analogy, for the Cornaro piece, admitted with wise hesitation by Armand (I. 120, 2) as attributable to Riccio, on the authority of Cicognara, is not within twenty years of his time, and the same applies to the two cognate specimens that follow it.³

(2) The date of the medal, as a commemorative work, should fittingly coincide with the completion of the candelabrum. Mr. G. F. Hill, in his *Portrait Medals of Italian Artists* (1912), places this event in 1516 (correcting Armand's 1510). In this year Riccio was forty-six, and the portrait does not make him look any older. He appears as in the full vigour of manhood.

³ See *Burlington Magazine*, April, 1913, p. 21, where this group is shown to be probably of Venetian origin, about 1550.

(3) Then with regard to the reverse, which is also simple and original, with the legend *Obstante . Genio .* irregularly written and unequally divided, the style is not inconsistent with some of Riccio's work.

The luminary at the top of the design is large enough to represent the sun instead of a star, as it is usually taken to be, and this may have a closer and more intelligible connexion with the scheme. The laurel tree, it may be noticed, is not really dead, for its roots must be alive to account for the new growth. It is an old tree, with all its lower branches gone and its head broken by the wind. Nevertheless in spite of adverse circumstances, with the help of the sun, if sun it be, it is making this new effort. The laurel's enormous power of vitality and rejuvenescence is well known, and it makes a good emblem of longevity. The young shoot is vigorous and already bearing berries, and it is in this part of the representation that the point of the symbol would seem to lie.

May it not be that the design refers not to the man but to his art, and in particular to this special production of his art? The peculiarity of the candelabrum is that it presents such a combination of Christian and pagan subjects, the latter predominating, and it is not unlikely that there may have been some demur to the introduction of inconsistent decoration into a work intended for ecclesiastical display. There are instances of the same thing in pictures, but this is a bolder and more noticeable step on the part of one devoted to the antique. The suggestion, therefore, is that the old tree represents antiquity, perishing by neglect, while the new birth stands for the revival of its spirit in the estimation of the more cultured and enlightened.

But whatever the meaning of the reverse may be, with the general predisposition to believe, sometimes incorrectly, that artists made their own portraits, it will need strong evidence to change the received opinion that Riccio executed this medal, at the time of his triumph, and in view of the fame that he desired.

T. WHITCOMBE GREENE.

XVIII.

A NEW MEDAL BY CLAUDE WARIN.

(See Plate XXI.)

THE medal of John Prideaux which is illustrated in Pl. **XXI.** seems to be hitherto unpublished. It is of lead, and measures $2\frac{1}{2}$ inches (64 mm.), exclusive of the loop. The patina is rather light, but there seems no reason to doubt its being a cast of the time to which it is dated, viz. 1638. Whatever its date, it represents an otherwise unknown work by the artist who signs it C·WA, for Claude Warin.

John Prideaux (1578–1650) is entitled on the medal Regius Professor of Divinity at Oxford, a position which he held from 1615 to 1641, when he became Bishop of Worcester. He is described as being in the fifty-eighth year of his age. Now he was born, according to the *Dictionary of National Biography*, on September 17, 1578. It follows that, strictly speaking, he could only be described as being in his fifty-eighth year between September 17, 1636, and September 16, 1637. Yet the medal is dated 1638. The explanation of the discrepancy probably lies in the loose use of "aetatis suae" as a translation of "so many years old." Prideaux was doubtless asked by the medallist how old he was, and replied "58 years," which was promptly set down as the "year of his age." The possibility of a similar error has

always to be reckoned with in estimating the year of production of a medal only dated by the age of the sitter.

Our medal is signed C. WA. The initial of the surname is made out of an inverted triangle by two strokes of the graver. There can be no doubt of the attribution to Claude Warin. I do not propose to attempt to decide here the much-vexed question of the distinction between Jean and Claude Warin, the more so as a much more competent critic, M. J. de Foville, intends to study the question thoroughly.¹ But I must yield to the temptation to make a few remarks bearing on the subject. In the first place, it seems impossible to dissociate this medal from the well-known portrait of Bodley, so that Rondot's² attribution of the latter to Claude is confirmed. We have in both the same highly academic conception of the portrait as a whole, and a remarkable similarity in the treatment of the hair, which is not modelled, but incised with the graver. This engraving was doubtless done on the wax model, not on the metal; it is indeed difficult to work with the graver on lead without throwing up a burr. The effect, anyhow, is feeble, and neither the Bodley nor the Prideaux can rank as a great work of art, although they both have a distinct attractiveness; the artist knew how to portray gentlemen of culture.

¹ He has begun by an article in the *Revue de l'Art ancien et moderne* for Aug. 10, 1913, on the early medals of Jean Warin.

² N. Rondot, *Claude Warin*, Paris, 1888. The date of the Bodley medal is fixed to 1646 by an entry, to which Mr. H. H. E. Craster has kindly called my attention, in the Library accounts for 1646: "Item to ye painter yt drew S^r. Thomas Bodley's picture & to Mr. Warren that made his medale to each of them 2^s In toto 4^s." (See J. D. Macray, *Annals of the Bodleian*, 2nd edit., 1890, p. 102; *Pretas Oxoniensis*, 1902, p. viii)

But if these two are by Claude Warin, what of the other medals of Englishmen signed "Warin" or "Varin" or "Va"? Rondot³ boldly assigns them all to Claude, pointing out that Jean was so fully occupied in France during the period when these medals were made that he cannot have spent sufficient time in England to do them, even if there were any evidence of his visiting the country. On the other hand, there is no evidence of the whereabouts of Claude from 1631 to 1646. Those years he may therefore have spent wholly or partly in England. The case against the attribution of so many English medals to Jean seems fairly strong, although it must be remembered that it did not take long, even then, to cross the Channel, and Jean might have made his wax models during short excursions and cast them at home. But the medals which Rondot ascribes to Claude seem to me, so far as they are represented in the collection of the British Museum, to fall broadly into two classes. One contains all the medals of English people,⁴ except the Prideaux and the Bodley, and perhaps also the medal of Le Sueur may be placed with them. By far the finest of them is the *unsigned* Thomas Cary,⁵ a brilliant piece of technique which is probably not surpassed by any other work of the kind in the seventeenth century. Now this medal seems to me to come extremely close to Jean

³ Who is followed by Forrer in his article in the *Num. Circ.*, 1913, 643 ff. Rondot's remark (p. 27), that almost all Jean Warin's medals, including the Richelieu, are struck, shows how carefully this writer's statements require to be verified.

⁴ *I.e.* Margaret Cary (for the signed medal of her husband, see next note), the Blakes, Richard Weston, Endymion Porter, Sir William Ducey, and Charles I (*Num. Chron.*, 1913, Pl. X.).

⁵ The signed medal of Cary is puzzling, and possibly designed by an inferior hand as a pendant to his wife's portrait.

Warin's signed medal of Richelieu of 1630 (*rev.* TANDEM VICTA SEQVOR). There is the same bold relief, rising very steeply from the field, the same feeling for the differentiation of texture, and the same handling of the hair. These qualities are present, though to a less degree, in the other medals of English men and women. It is strange that the finest of all, the Cary, should be unsigned. Possibly it was meant to have a signed reverse, like the Richelieu.

The other class, vastly inferior, it seems to me, to the first, contains such medals as the Mazarin, the Alphonse de Richelieu, the Salian, and the restitutions of Cicero, Aristippus, Giulio Romano, &c. They are large and pretentious and for the most part devoid of character. It hardly seems possible to me that the same man can have made both classes of medals, unless his hand had begun to fail him after the period to which the English medals belong. It is true that the influence of Dupré is very strong in that period; but the works are spirited and thoughtful. To say, with Rondot, that these English medals lack originality, is hardly fair to them. The medals of Frenchmen, and the restitutions which have been mentioned, are, with the possible exception of the Salian, heavy and lifeless.

The question, however, can only be decided—if then—after an examination of more material than is available to me. It might have been easier to come to a conclusion had Rondot condescended to illustrate more of the medals that are certainly signed by Claude, instead of confining his illustrations almost entirely to the medals of doubtful attribution.

Meanwhile, M. de Foville has kindly sent me casts of two medals which bear on the question. One is the

supposed Louise Pérachon, signed C · WARIN,⁶ the other the Marguerite Bellet.⁷ M. de Foville is of opinion that Rondot is right in attributing all the English medals to Claude, whose work is very unequal. Though I hesitate to differ from so high an authority, I must confess that, to my eye, the Louise Pérachon and the Marguerite Bellet have just that quality of dullness and heaviness in conception and execution which seems to mark them, with the Prideaux and Bodley, as the work of an artist distinctly inferior to the author of the medals of Charles I, Thomas Cary and his wife, the Blakes, and the rest of the Englishmen in question.

In preparing this note, I have had the advantage of consulting Miss Helen Farquhar. It is particularly gratifying to me to find that the opinion of one who has made so extensive a study of the English medals of the period coincides with my own in all the essentials of the division between the medals which may safely be assigned to Claude, and those which seem to be by a more genial member of the family, whether he is Jean or another unknown to fame. In any case, in dealing with the question of attribution, one has to remember that various members of the family may well have worked in common, as the Roettiers seem to have done. This would perhaps account for the absence of initials in many of the signatures.

G. F. HILL.

⁶ Cp. Rondot, Pl. i. No. 2.

⁷ *Ibid.*, p. 41, No. 5. On the cast only VARIN is discernible, but M. de Foville writes "il se pourrait que le C fût tombé à la fonte, car ce médaillon est à part cela identique aux autres exemplaires (Rondot, p. 41, No. 5) signés C · VARIN. À la loupe, sur l'original, il me semble voir C · VARIN."

MISCELLANEA.

SOME UNCERTAIN COINS ASSOCIATED WITH CHIOS.

THE uncertain coin of Ionia published on p. 268 of the *Num. Chron.* for the current year recalls a smaller piece published by Canon Greenwell on p. 282 of the volume for 1897, and illustrated on Pl. xiv. 8. Cp. Regling, *Sammlung Warren*, Tafel xxxii. 1411. This coin bears a Sphinx seated right on obverse with both forelegs on the ground, the farther one showing in front of the nearer, and on the reverse a Gorgoneion in a shallow incuse square. It weighs 32·7 grs. (2·118 grammes). Another specimen of the same coin in the Leake Collection, at the Fitzwilliam Museum, Cambridge, measures 13·00 mm., and weighs 29·81 grs. (1·917 gram).

These coins are evidently of later date than the one under consideration, though they might easily belong to the same mint. The weights, however, are a little hard to reconcile with this supposition. The two types are not so far removed from each other in time as to be the same denomination, degraded in the later specimens. Besides which, the difference in weight is too great even for the characteristic rapid decline of some Greek standards. A different denomination seems hardly possible under the usual Ionian system of division into thirds and sixths. One is almost driven, therefore, to demand a change of standard, though it is hard to say in what standards. In volume ii. of his *Traité* (p. 1134), under the head of Chios, M. Babelon draws attention to two small silver coins of Ionian fabric in the National Collection at the Bibliothèque, Paris, which he considers to be alliance pieces between Chios and neighbouring cities. A third is described by M. Babelon in the *Inventaire Waddington*, No. 1269, Pl. ii. 15, but I place it first in order here as it seems to be the earliest. They all three have a Sphinx on the obverse—the first to right of very early style raising the off forepaw, the second also to right with both forepaws on the ground, and the third to left raising the off forepaw.

No. 1 has a Horse's head right on the reverse; No. 2 a Helmeted bearded head right; and No. 3 a Lion's head left in a beaded square; thus suggesting alliances between Chios, and Cyne, Calymna, and Miletus respectively. In a similar way our coins might be looked upon as recording an alliance between Chios and Clazomenae.

Another link with Chios is afforded by the Sphinx's up-raised forepaw in the B.M. specimen, and in two of those from Paris. This feature occurs not only on some of the early electrum, as Mr. Hill remarks in his footnote, but on a whole series of early silver didrachms, one of which I published in *Num. Chron.* for 1911, p. 85 and ff.

On the subsequent issues at Chios this attitude of the Sphinx is, with some rare exceptions, not repeated till Imperial times, when it became the rule; but if we are to suppose that the B.M. uncertain piece and the similar ones in the Canon Greenwell and Col. Leake collections belong to the same mint, then they present a strong similarity to the Chian issues. The earlier one has the raised forepaw and the later one not, though we must not forget that in the former case the Sphinx is turned to the left, and in the latter to the right. At Chios the Sphinx invariably looks to left on the silver coinage until the first century B.C., when some of the Attic drachms then struck show a Sphinx to right. The whole of the evidence is contradictory whichever way one looks at it, and it is impossible to come to any decision in the matter at present, but it seemed worth while to draw attention to the above facts in the hope that they may help towards the finding of a true verdict at some future date.

J. MAVROGORDATO.

NOTICES OF RECENT PUBLICATIONS.

Numismatique Constantinienne. Par Jules Maurice. Tome III. Paris: Leroux, 1912. Pp. xlviii + 282. With 11 plates.

The Relative Values of Roman Coins.

THE third volume of M. Jules Maurice's work published a few months since is not less useful and instructive than those which have preceded it.

It completes the notices of the mints of the period by dealing with those of Nicomedia, Cyzicus, and Antioch in Asia, and Alexandria in Africa. The accounts of these mints have been largely revised since they were published as separate

papers in various Numismatic Journals, and are of great value for reference.

It may be, however, that numismatists in general will find the Introduction not the least important and suggestive portion of the book. After an interesting chapter on the persecution under Maximinus Daza and its effect on the coin types, M. Maurice proceeds to expound certain theories as to the classification and relative values of the coinage of the period, and the effect of the monetary reforms of Diocletian and Constantine the Great which have been arrived at by M. Dattari and himself. The views of M. Dattari are set out in the paper read by him at the Brussels Numismatic Conference in 1910 in the *Rivista Italiana di Numismatica*, 1906, Fascicolo III., and in the *Proceedings of the Italian Institute of Numismatics*, 1913, vol. i. The plate published with the Brussels paper is reproduced by M. Maurice.

The following is an attempt to summarize the conclusions of the two authors, and to indicate what evidence is available to support them and what is lacking. To some extent the authors are agreed, but as there are several important points of difference between them, their conclusions diverge.

Their theories, so far as set out by M. Maurice, deal more particularly with the coins which are wholly or in part composed of bronze, which they agree in classifying as follows:—

Grand bronze (G.B.), Moyen bronze (M.B.), Moyen bronze reduit (M.B.R.), Petit bronze (P.B.), Petit bronze reduit (P.B.R.), Quinarius, a coin which, following M. Mowat, it is convenient to call a Quadrans, but which M. Dattari considers to be the Cententionalis, and the smallest coin of all, the Nummus, which in fact was very little used during the period under consideration, and was little more than a monetary expression. The reduced coins appeared under the reform of Constantine, and our authors consider that the G.B. or large follis represented the earlier sesterce, and that the coin called quinarius is in fact the denarius communis of account.

To assist in the identification of the coins it may be pointed out that the coin called P.B. is of the size of the *Securitas* and *Spes* types of Helena and Fausta, the P.B.R. comprises (*inter alia*) the larger *Gloria Exercitus* type, while the *quinarii* include the smaller pieces bearing the same inscription. The pieces which M. Maurice calls *quadrantes* were common under the Tetrarchy, when they bore on the obverse the radiate bust of the Emperor, and on the reverse the legend *Concordia Militum*. After the reform of Constantine coins of this denomination were issued only in the territories of Licinius.

They commonly bear his radiate bust, or the helmeted bust of his son, and the reverse legend Iovi Conservatori with a mint-mark $\begin{smallmatrix} \times \\ \text{II}\Gamma \end{smallmatrix}$.

M. Dattari has fixed the approximate weights of these coins by the examination of over 6000 specimens, mostly in the finest condition, with the silver wash still visible. These coins have been deposited in the Brussels Collection, and the curious can there check his results. M. Maurice accepts them as correct, and the present writer, who has examined other coins of the period to the number of some hundreds, ventures to express his concurrence. His results showed slightly greater weights, but the difference, no doubt, arose from the fact that the specimens he examined were for the most part heavily patinated.

The coins of all denominations from G.B. to quinarius inclusive are found silver washed, but no washed quadrantes or nummi have been recorded. M. Maurice gives the results of a number of analyses made in the mint of France, from which it appears that all the silver-washed pieces analyzed contained an alloy of silver varying roughly from 2 per cent. to 4 per cent. (or, as claimed by M. Dattari, to 4.50 per cent.), while no such admixture is found in the quadrantes or nummi.

The relative value of silver to bronze being, during the period in question, at first 55.38 to 1, and afterwards 63.29 to 1,¹ the above-mentioned alloy caused a very appreciable enhancement of the actual value of the mixed pieces, and both authors consider that they passed current at that actual value, whatever it was, and that the wash of silver was employed to differentiate them in the public eye from the pure bronze currency. There seems every reason for accepting this interesting conclusion which satisfactorily solves the vexed problem of the silver washing, and disposes of the theory that these coins were either something of an official fraud on the public, and an attempt to make base metal pass as silver, or at best a token coinage.

So far MM. Maurice and Dattari are at one, but divergence commences with the different interpretations which they place upon the mint-mark $\begin{smallmatrix} \times \\ \text{II}\Gamma \end{smallmatrix}$ above referred to as being found on the later issue of the quadrantes of bronze. This mark at once recalls the mark IIS on the early silver sestertii, and M. Maurice interprets it "decima pars," while M. Dattari reads "duodecima pars sestertii." The former interpretation

¹ The authorities are not agreed as to these exact values.

seems to be the more probable, but whichever be correct, we obtain a measure of the value in bronze of the mixed pieces which can be easily applied to them. It is to be hoped that a sufficient number of analyses will in time be carried out to enable us to ascertain with certainty what was the average or theoretic amount of silver alloy introduced by the mint into these issues, for such knowledge would perhaps be a determining factor in fixing the scale of values.

At present the variation of the percentages actually found is such that either a decimal or a duodecimal scale may be correct. An alloy of about 3 per cent. is sufficient for M. Maurice, while 4.50 per cent. would fully justify M. Dattari. In each case the basis of the scale is the weight and value of the quadrans, viz. 2.88 grammes of bronze, and the following results in grammes are arrived at:—

Denomination of coin	Theoretic weight	Decimal scale value.	Duodecimal scale value.
G.B.	10.00	28.80	34.56
M.B.	6.66	19.20	23.04
M.B.R.	5.00	14.40	17.28
P.B.	3.33	9.60	11.52
P.B.R.	2.50	7.20	8.64
Quinarius	1.66	4.80	5.76
Quadrans	2.88	2.88	2.88
Nummus	1.44	1.44	1.44

M. Maurice considers that the value of the pound of gold under the respective reforms of Diocletian and Constantine was 240,000 and 288,000 grammes of bronze, while M. Dattari contends for 288,000 and 345,600 grammes respectively.

He considers that the pound of 288,000 was introduced by Augustus,² and his argument may be put in his own words contained in a recent letter on the subject. "Under Nero and thence to Caracalla, when the pound of gold was divided first into 45 aurei, and then into 50, the equivalence of one aureus to 25 denarii remained, as did the equivalence of one denarius to 4 sesterii or 192 grammes of bronze. When Diocletian introduced the new system by cutting one pound of gold into 60 parts and re-established the denarius of Nero, it is probable that one denarius remained equal to 192 grammes of bronze, and therefore with his reform one pound of gold was equal to 288,000 grammes. When Constantine

² *Revue Numismatique*, 1909, pp. 355 et seq.

introduced the solidi of 72 to the pound of gold the proportion of bronze rose to 345,600 grammes."

He does not, therefore, admit the existence of the pound of 240,000 grammes which is necessary to the theory of M. Maurice, because we know from the Edict of Diocletian that the denarius communis was one 50,000th part of the pound, and the value of that denarius is, according to his scale, 4.80 grammes.

The authoritative decision of this point of difference would, it seems, give the victory to one scale or the other, but there does not appear to be conclusive documentary evidence on either side. M. Maurice calls to his assistance the mark XXI frequently found in the field of the large follis, the position of the type being of course indicated by the vertical line. This he considers to mean that the coin is of the value of 20 nummi or 28.80 grammes, and he similarly interprets the Greek letters KA, which are also common, but are commonly found together at the side of the type.

M. Dattari believes that the large follis (G.B.) introduced by Diocletian took the place of the coins classed by collectors as Æ^3 which bear the exergual mark XXI or KA, and form a large portion of the currency of the latter part of the third century; and he believes that these coins, which are frequently found silver-washed, were in fact of mixed metal, and passed as sesterces or quarters of the denarius. It may be pointed out in this connexion that the silver-washed coins of the latter half of the third century bear other marks as well as those above mentioned, and that it seems probable that the whole of the coins of the period classed as Æ^3 were silver-washed at the time of their issue. If this be so, seeing how few pieces of smaller module exist, it would appear that there must then have been as great a lack of small change in the Roman Empire as was at times the case in England, and that Diocletian's reform and provision of smaller money must have been of great public advantage.

It is easy to accept the above interpretation of the mark XXI as the interposition of the type between the numerals may well indicate that they are not to be read as a continuous number, but when the mark is exergual, or in Greek characters, some difficulty arises. It will be remembered that the exergual mark XX is frequently to be found on small silver-washed coins of Aurelian which, in size, weight, and character, do not seem distinguishable from those marked XXI. It hardly seems possible that coins so similar can have passed at different values, and at values so slightly differing, and the marks may

be different expressions of the same fact, viz. that the coin bore the relation of 20 to 1 to some other coin. This suggestion is at variance with the view, held by the older numismatists, that these marks were employed in the reform of Aurelian to indicate that the pieces were to pass at the rate of 20 or 21 respectively to the large bronze sesterce, or 500 or 525 to the aureus. If it be true that silver-washed coins were always alloyed with silver, then it is clear that the last-mentioned theory would fail, for the washed Æ^3 would have been of too great intrinsic value to occupy so low a place in the scale, and with something like a 3 per cent. alloy they would be worth about one-twentieth part of a denarius. In any case it seems impossible that the reference of the mark XXI on the coins of Aurelian can have been to the nummus, for that coin was not in issue, and there seems no reason for believing that it was then even a monetary expression indicating the value to which the name was afterwards attached.

It may be objected that Aurelian did not strike fine silver denarii, and this is true, but most numismatists, and especially M. Dattari, will agree that the coin never lost its theoretic place in the Roman series at least until the reform of Diocletian.

Again Carausius, who struck neither G.B. nor nummi, but did issue fine silver denarii, frequently used the mark XXI and less frequently the mark XX. If those marks had any real monetary value on his coins they could hardly refer to anything but the denarius. He may, however, have merely copied the mint-marks of Continental Emperors as he certainly copied their types.

It does not seem difficult to believe that a simple mark of proportionate value may have been employed by Aurelian in one relation and by Diocletian, whose monetary system was quite different, in another.

M. Maurice also refers to the monogram CMH which terminates the reverse legend of certain M.B. of Nicomedia and Cyzicus, which he reads as 900 = 1 pound of silver, and, taking as he does the pound of silver to have been worth 17,280 grammes of bronze, and to have stood as 13.89 to 1 in relation to gold, he reaches a total of 240,019.20, which is very little in excess of the gold value of 240,000. If his interpretations of mint-marks are correct they go far to support his conclusions, but, as M. Dattari has pointed out, the position of this monogram is one which is not usually occupied by a mint-mark or mark of value, and there may be some other explanation of it.

There are also other marks such as K.P., K.B., &c., found on M.B. demanding interpretation, which, if the theories of M. Maurice are to be accepted as conclusive, should be consistent with them. In fact, the whole question of the mint-marks of the third and fourth centuries requires further study and explanation.

The two authors are agreed as to the relation which the mixed coins bear to each other and to the pound of gold, but as they differ as to the relative value of gold to bronze, they also differ as to the relation of bronze coins to those of other metals. Their results are tabulated below. M. Maurice's decimal scale applied to a pound of gold of the value of 288,000 grammes of bronze works out as follows :—

Name of coin.	Nummus.	Quadrans	Quinarus.	P B R.	P B.	M B R.	M B	G. B.	Pound of gold
Nummus	1	2	3 $\frac{1}{2}$	5	6 $\frac{3}{4}$	10	13 $\frac{1}{2}$	20	200,000
Quadrans	—	1	1 $\frac{1}{2}$	2 $\frac{1}{2}$	3 $\frac{1}{4}$	5	6 $\frac{3}{4}$	10	100,000
Quinarus	—	—	1	1 $\frac{1}{2}$	2	3	4	6	60,000
P.B.R.	—	—	—	1	1 $\frac{1}{2}$	2	2 $\frac{2}{3}$	4	40,000
P.B.	—	—	—	—	1	1 $\frac{1}{2}$	2	3	30,000
M.B.R.	—	—	—	—	—	1	1 $\frac{1}{3}$	2	20,000
M.B.	—	—	—	—	—	—	1	1 $\frac{1}{2}$	15,000
G.B.	—	—	—	—	—	—	—	1	10,000

M. Dattari's duodecimal scale applied to a pound of gold of 345,600 grammes of bronze is identical as to the mixed coins, but gives the following somewhat more convenient results for the nummus and quadrans, viz. :—

Nummus	1	2	4	6	8	12	16	24	240,000
Quadrans	—	1	2	3	4	6	8	12	120,000

It will be noticed that the values which M. Dattari attributes to the mixed coins are, like his pound of gold, one-fifth higher than those of M. Maurice. If we find sufficient evidence to prove the appreciation of the pound of gold from 288,000 to 345,600 grammes, is it not possible that the mixed pieces also appreciated in like proportion, in which case the scale of M. Dattari would then correctly take the place of that of M. Maurice?

If we may accept either scale, there remains the further

problem of the satisfactory application of it to the gold and silver coinage which must be solved before we can claim a perfect knowledge of the monetary systems of the fourth century. Although large accounts were kept with sufficient accuracy by means of folles or purses and the denarius communis, there must have been an accepted rate of exchange between all the pieces in circulation on which the small trader and money-changer carried on their businesses. Our authors have, as we have seen, provided an acceptable and identical solution so far as the mixed coinage is concerned, and M. Dattari's scale provides a simple one for the bronze pieces.

As to the more precious metals, it seems to be established that under the reform of Constantine 72 solidi were struck from the pound of gold, and that the silver coins of that reform were the miliarenses and the siliqua. It is also established that under the reform of Diocletian the pound of gold was reckoned as worth 50,000 of the denarii communes, and it would seem common ground that this proportion was raised to 60,000 by the reform of Constantine.

The miliarensis was nominally, at any rate, 1000th part of a pound of gold, and it is agreed that it was of the value of 10 G.B., and that its weight of 4.55 grammes was identical with that of the solidus.

M. Babelon accepts it as a fourteenth part of the solidus, but considers it to have been "*monnaie de luxe*," rarely issued, and it is certainly very scarce. It would be, under M. Maurice's scale, of the value of 288.00, and, under that of M. Dattari, of 345.60 grammes of bronze, and in either case an element of error is here introduced, for, under the one scale 14 miliarensia would be worth 4032 grammes though the solidus was worth 4000 grammes only, while under the other scale we get a value of 4838 grammes against a solidus of 4800 grammes.

We have here apparently a legalized margin of error which may have some bearing on the problem of the small trader above referred to. The exact position of the siliqua is obscure, and it may even be doubted whether it was issued in any quantity during the reign of Constantine the Great, whose silver of any denomination is rare. MM. Babelon and Maurice consider it to be the twenty-fourth part of a solidus and that it stood in relation to the miliarensis as $1\frac{3}{4}$ to 1. Its theoretic weight is given as 2.60 grammes, and M. Maurice believes that it was at first of the value of 144.00, and afterwards of 166.66 grammes of bronze. M. Dattari appears to hold that it represented the denarius

and was one-twenty-fifth of the solidus, which would give it under his scale a value of 192 grammes. The name siliqua was originally applied to a weight $\frac{1}{1728}$ th part of one pound of gold. M. Maurice's scale is practically in accord with this as 1728 of the heavier siliquae give 287,999 grammes, while M. Dattari requires 1800 coins to reach the value of his pound of gold. The respective scales appear, therefore, to be as follows :—

DECIMAL SCALE.

1 Denomination of coin.	2 Value in bronze.	3 Siliqua.	4 Milia- rense	5 Solidus.	6 Pound of gold
Nummus	1.44	120	200	2800	200,000
Quadrans	2.88	60	100	1400	100,000
Quinarius	4.80	36	60	840	60,000
P.B.R.	7.20	24	40	560	40,000
P.B.	9.60	18	30	420	30,000
M.B.R.	14.40	12	20	280	20,000
M.B.	19.20	9	15	210	15,000
G.B.	28.80	6	10	140	10,000
Siliqua	166.66	1	$1\frac{3}{4}$	24	1,728
Miliarense	288.00	—	1	14	1,000
Solidus	4000.00	—	—	1	72
Pound of gold	288,000.00	—	—	—	1

The figures given in column No. 3 show an error of +6.14 grammes throughout. A reduction of one quinarius would reduce this error to +1.34, and if we take 58 quadrantes and 116 nummi the remaining error is +0.38 only.

In column 4, a siliqua and three-quarters gives an error of +3.66; the rest of the column is accurate.

In column 5, 24 siliquae give an error of -1.11; in respect of all other coins, the error is +32.00, which can, of course, be reduced from the G.B. downwards, but the common denominator 10 will be lost as well as the proper proportion to the previous column.

In column 6, 1728 siliquae give, as we have seen, the same error, and the remaining figures are accurate.

DUODECIMAL SCALE.

1 Denomination of coin.	2 Value in bronze	3 Siliqua.	4 Milia- rense	5 Solidus.	6 Pound of gold
Nummus	1.44	144	240	3360	240,000
Quadrans	2.88	72	120	1680	120,000
Quinarius	5.76	36	60	840	60,000
P.B.R.	8.64	24	40	560	40,000
P.B.	11.52	18	30	420	30,000
M.B.R.	17.28	12	20	280	20,000
M.B.	23.04	9	15	210	15,000
G.B.	34.56	6	10	140	10,000
Siliqua	192.00	1	1 $\frac{3}{4}$	25	1,800
Miliarense	345.60	—	1	14	1,000
Solidus	4800.00	—	—	1	72
Pound of gold	345,600.00	—	—	—	1

Here the error in column 3 is +15.36 grammes, reducible in case of the lower denominations.

In column 4 a siliqua and three-quarters gives an error of -9.60, the remaining figures being correct.

In column 5 the siliquae are correct, and the remaining figures show an error of +38.40, reducible in the case of the G.B. and all smaller denominations.

M. Dattari, in his published table,¹ prefers to set out his results with more precision, giving fractions in nummi, but it is suggested that the scale of the small trader and money-changer must have been very simple, avoiding fractions as much as possible. The scales above given show the largest number of pieces of each denomination which the seller of gold could exact without exceeding the error which is found to be authorized if the common view that a miliarense passed as one-fourteenth part of a solidus is accepted. It is less easy to suggest a marginal limit when the sale was of baser metals for gold, but assuming, as we must, that the vendor traded at a profit, we may make a somewhat similar allowance.

It may be that, as on the Stock Exchange of to-day, there were regular buyers' and sellers' prices, but whether the sale was of gold or other metal, the actual rate at which the transaction was carried out depended, no doubt, as do similar transactions now, on the price of the day, the local conditions, and the position and needs of the parties.

Neither of the above scales is so conclusively exact and con-

¹ *Rivista Italiana*, 1906, Fasc. III. The figures are unfortunately invalidated to a slight extent by an error as to the weight of the nummus which has crept in.

venient as to settle the differences between our authors, though the balance of convenience is perhaps in favour of the decimal scale. The vital point seems to be the conclusive proof of the value to which Constantine appreciated the pound of gold.

There can, however, be little doubt that MM. Maurice and Dattari have rendered great service to Roman Numismatics and directed the study of the questions raised above into the proper channels, and that, whatever view may be ultimately taken of the points of difference between them, the principles underlying their work are sound.

PERCY H. WEBB.

Die Antiken Münzen Mysiens. Unter Leitung von F. Imhoof-Blumer, herausg. von der Kgl. Akad. der Wissenschaften. Bearb. von H. von Fritze. I. Abteilung: Adramytion—Kisthene. Mit Tafel I.–X. Berlin (Reimer), 1913. Pp. v + 223.

This is the first part of the new series of volumes of the great Berlin Corpus, which is to be concerned with Asia Minor. It is but a few months since we noticed (*Num. Chron.*, 1912, p. 227) the latest part of the earlier series dealing with Thrace, by Münzer and Strack, in the production of which the author of the volume before us played a material part. We have become accustomed to regard the progress of the Corpus as slow; but the term is relative, and no one who examines the details of the work by Dr. von Fritze, Dr. Regling and those who, unfortunately, are no longer to be counted among the contributors to the publication, can be anything but astonished at the rate of progress. Whether it will be as speedy in the future, or whether the whole load will gradually devolve on the "shoulders immense, Atlantean" of Dr. von Fritze, remains to be seen. On the somewhat unseemly controversy which has arisen about the methods of the publication, and which can do no good to any one, we wish to express no opinion here, knowing well that numismatists and historians are as likely to agree as poets and philosophers. But the trouble probably has its roots in the singular opinion, which we believe was held by the great scholar in whose honour the undertaking was begun, that no special training was required to make a numismatist; an opinion which may have influenced the Academy in its administration of the scheme.

The extreme thoroughness of Dr. von Fritze's methods makes it almost impossible to pick holes in his work, even if

one wished to do so. I may mention only that the British Museum has comparatively recently acquired good specimens of Apollonia 282 and Hadrianoi 523. It is that same thoroughness, doubtless, which has caused the damning word "ungenau" to be so plentifully sprinkled over the pages of the book. It seems sometimes to be applied to descriptions by previous writers, which are manifestly intended to be merely summary, as well as to descriptions containing actual errors.

G. F. H.

Die Münzen und das Münzwesen bei den Scriptores Historiæ Augustæ. Inaugural-Dissertation. . . . Berlin. Von Karl Menadier.

This useful little essay aims at throwing fresh light on the vexed question of the historical authority and the date of the "Augustan History," by an examination of the statements relating to numismatics contained in it and a comparison of them with what we know from other sources. The arrangement is clear and well thought out, the criticism is vigilant and acute, and the general method is that of the sanely sceptical modern historian. The general results arrived at are fairly definite and satisfactory. The various *Lives* must date from the time of Constantine or later, and many of the statements about numismatics contained in them are either confused or absolutely wrong. In some cases it seems possible that the writer simply invented what he states as a fact. The one point in Dr. Menadier's work that seems to us to merit adverse criticism is his tendency to overstrain his points and to attach too much weight to minute fragments of evidence. On p. 44, for example, he claims that the fact that an amount is given first in sesterces, then in pounds of silver, proves that, at the date of writing, the former style of reckoning was no longer intelligible. Surely the utmost that we can infer is, that it was no longer easily and universally intelligible; but this necessary modification, alas, deprives the argument at this point of its force. Again, we may observe that on p. 56 a style of reverse type, already common under Constantius II and Constans, is said not to come into general use until the time of Julian. We do not think that Herr Menadier makes out much of a case for pushing the date of composition of this work towards the end of the fourth century. But these are small points; and we must be sincerely grateful to the author for a careful and illuminating study, as too for the useful bibliographies which he adds at the close of his work.

H. M.

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CATALOGUE OF LANTERN-SLIDES AND NEGATIVES.

(*Supplement No. 1 to the List published in 1913.*)

GREEK AND ROMAN COINS.

TOWNS, &C., IN ALPHABETICAL ORDER.

- H9012 Achæan League, *Æ*. (B.M. Cat. *Peloponnesus*, pl. 2,^{1.})
H9013 Aegina, *Æ*. (B.M. Cat. *Attica*, pl. 23,¹ 24,¹³ 25,^{5.})
H9014 Aegospotami, *Æ*. (B.M. Cat. *Thrace*, p. 187, No. 1.)
H9015 Ambracia, *Æ*. (B.M. *Guide*, v. B 10.)
H9155 Anemurium, *Æ*. Primitive statue of Artemis. (B.M. Cat. *Lycaonia*, &c., pl. 7,⁹)
H9156 Aphrodisias Cariae, *Æ*. Types showing Cultus-statue of Aphrodite.
H9017 Arcadia, *Æ*. (B.M. *Guide*, iii. B 37.)
H9018 Argos, *Æ*. (B.M. Cat. *Peloponnesus*, pl. 27,¹ 12.)
H9019 Aspendus, *Æ*. (B.M. *Guide*, ii. A 39.)
H9020 Boeotia, *Æ*. (B.M. Cat. *Central Greece*, pl. 5,^{7.})
H9157 Caesarea Cappadociae, *Æ*. Primitive cultus figure. (B.M. Cat. *Galatia*, &c., pl. 9,^{19.})
H7403 Carthago Nova, Hispano-Carthaginian Barcid coinage. (*N. Chr.*, 1914, pl. VIII. 11, &c.)
H7412 Caulonia, *Æ* restruck on Corinthian stater. (*N. Chr.*, 1914, pl. VII. 7.)
H9021 Ceos. (B.M. Cat. *Crete*, pl. 21,^{4.})
H7415 Chios. 'Period I. (625-575 B.C.) El. and *Æ*.
H7416 " " II. (575-545 B.C.) El. and *Æ*.
H7417 " " III. (545-500 B.C.) *Æ*.
H7418 " " III. and IV. (500-478 B.C.) *Æ*.
H7409 Corinth. Fourth-century stater. (*N. Chr.*, 1914, pl. VII. 13.)
H9158 Cyrene, *Æ*. Types showing Chariot and Zeus Ammon.
H9037 Cythera. (B.M. Cat. *Peloponnesus*, pl. 21,^{15.})
H9031 Elis, *Æ*. (B.M. Cat. *Peloponnesus*, pl. 10,¹² 11,^{1.})

- H9159 Ephesus ? El. Earliest inscribed coin. (B.M. Cat. *Ionica*, pl. 3,⁸.)
- H9160 „ „. Fifth-century Bee types.
- H9161 „ „. Fourth-century Bee and Stag types.
- H9162 „ „. Third-century. Hellenic Artemis: Berenice II.
- H9163 „ „. 87-84 B.C. Artemis types.
- H9165 „ „. Æ Artemis the huntress: Artemis riding the deer.
- H9166 „ „. Æ Artemis cultus-statue.
- H9032 Eretria, Æ. (B.M. *Cuide*, ii. B 39.)
- H9033 Euboea, Æ. (B.M. Cat. *Central Greece*, pl. 17,³.)
- H7408 Gela. Fifth-century Tetradrachm. Bull wearing wreath. (*N. Chr.*, 1914, pl. VII. 9.)
- H9167 „ „. Fifth-century Tetradrachm. Sosipolis crowning bull. (C. F. Hill, *Coins of Ancient Sicily*, pl. V. 11.)
- H7403 Hispano-Carthaginian Barcid Coinage of Carthago Nova. (*N. Chr.*, 1914, pl. VIII. 11, &c.)
- H9168 Hypaepa, Æ. Artemis Anaitis in temple (*temp.* Hadrian).
- H9169 Idalium, Æ. Sphinx and Lotus; Nagidus, Æ. Aphrodite.
- H7401 Ionian Electrum. Pegasus. (*N. Chr.*, 1914, pl. VIII. 1.)
- H9170 Magnesia ad Maeandrum, Æ. Leukophryene.
- H7402 Melos. Fifth-century staters. (*N. Chr.*, 1914, pl. VII. 14-16)
- H7410 Messana (Sicily). Tetradrachms lettered A, B, D, &c. (*N. Chr.*, 1914, pl. VII. 12.)
- H7414 Metapontum. Fourth-century silver. (*N. Chr.*, 1914, pl. VII. 2.)
- H9169 Nagidus, Æ. Aphrodite; Idalium, Æ. Sphinx and Lotus.
- H7407 Nysa (*N. Chr.*, 1914, pl. VIII. 3), Tyre, Sidon. Prize crowns.
- H9174 Paphos, Pergamum, Sardes, Æ. Shrine of Paphian Aphrodite.
- H9171 Perga, Æ. Pergaeon Artemis (autonomous and imperial.)
- H9172 „ „. Æ. Tetradrachm, *obverse*. (B.M. Cat. *Lycia*, &c., pl. 24,¹.)
- H9173 „ „. Æ. Tetradrachm, *reverse*. (B.M. Cat. *Lycia*, &c., pl. 24,¹.)
- H9174 Pergamum, Paphos, Sardes, Æ. Shrine of Paphian Aphrodite.
- H7411 Rhegium, silver and copper hemiobols. (*N. Chr.*, 1914, pl. VII. 5.)
- H9175 Samos, Æ. Cultus-statue of Hera.
- H9174 Sardes, Paphos, Pergamum, Æ. Shrine of Paphian Aphrodite.
- H9176 Selinus, Æ. River-gods Hypsas and Selinos sacrificing.

H9177 Selinus, .R. Artemis and Apollo; Selinus; Heracles; Hypsas.
H7407 Sidon, Tyre, Nysa. Prize crowns.

H7413 Thurium. Didrachms of reduced standard, old and new types. (*N. Chr.*, 1914, pl. VII. 4.)

H7407 Tyre, Sidon, Nysa. Prize crowns.

EMPERORS, KINGS, OR DYNASTS, AND MAGISTRATES, IN ALPHABETICAL ORDER.

H9016 Antigonus Gonatas, .R. (*B.M. Guide*, v. B 5.)

H7405 Antiochus III, Seleucus I and III. Tetradrachms. (*N. Chr.*, 1914, pl. VIII. 7-9.)

B 663 Clodius Macer, denarius, with aurei and denarii of Nero and Civil Wars. (*N. Chr.*, 1914, pp. 110, ff.)

H7404 Eucratides and Timarchus. (*N. Chr.*, 1914, pl. VIII. 10, &c.)

H9084 Eumenes II, .R. (*B.M. Cat. Mysia*, pl. 24,⁵.)

B 664 Galba. Denarii of Civil Wars and Galba, Asses of Nero. (*N. Chr.*, 1914, pp. 110, ff.)

B 665 „ Aurei and Denarii; denarii of Civil Wars. (*N. Chr.*, 1914, pp. 110, ff.)

B 666 „ Aureus and Sestertii. (*N. Chr.*, 1914, pp. 110, ff.)

B9035 Gordian III. (*B.M. Cat. Med.* pl. 41,⁴.) Reverse only.

B9036 „ („ „ pl. 42,¹.) Reverse only.

Macer. *See* CLODIUS MACER.

B 663 Nero, aureus; aurei and denarii of Civil Wars and denarius of Clodius Macer. (*N. Chr.*, 1914, pp. 110, ff.)

B 664 „ asses; denarii of Civil Wars and Galba. (*N. Chr.*, 1914, pp. 110, ff.)

H3383 Orodes I of Parthia; restruck tetradrachm. (*B.M. Cat. Parthia*, pl. 14,¹⁰.) *Obverse*.

H3384 „ „ restruck tetradrachm. (*B.M. Cat. Parthia*, pl. 14,¹⁰.) *Reverse*.

B 667 Otho, aureus; aurei of Vitellius; denarii of Civil Wars. (*N. Chr.*, 1914, pp. 110, ff.)

H7405 Seleucus I and III, Antiochus III. Tetradrachms. (*N. Chr.*, pl. VIII. 7-9.)

H7404 Timarchus and Eucratides. (*N. Chr.*, 1914, pl. VIII. 10, &c.)

- B 667 Vitellius, aurei, aureus of Otho; denarii of Civil Wars.
(*N. Chr.*, 1914, pp. 110, ff.)
- B 668 Vitellius, aurei, denarius and as. (*N. Chr.* 1914, pp. 110, ff.)
- B 669 " aurei and denarii. " " "
- B 670 " aurei, denarius and as. " " "

GREAT BRITAIN AND IRELAND.

- 96 NS Edward III. Florin, half-florin, and quarter-florin.
- 97 NS { Edward III. Noble of 1344.
 { Edward IV. Angel of first issue.
- 88 S Edward IV. (*N. Chr.*, 1914, pl. XXI. 1-5.)
- 89 S " (" " " 6-12.)
- 90 S " (" " pl. XXII. 1-6.)
- 91 S " (" " " 7-14.)
- 92 S " (" " pl. XXIII. 1-4.)
- 93 S " (" " " 6-10.)
- 94 S " (" " pl. XXIV. 1-5)
- 95 S " (" " " 6-11.)
- 86 NS { Henry VII. Testoon. (Grueber, XIII. 388.)
 { Henry VII or VIII (?). Sovereign (m.m. Lis and Cross
 { Crosslet).

MEDALS, BADGES, &c.

- 83, 84 N Anne; cliché proofs of large union medal or seal (?).
- 85 N Italian plaquette of Hugo d'Este and Parisina Malatesta.

MISCELLANEOUS.

- 46 N Spanish lever coin-press found with dies (Philip III or IV (?) copper) at Seville.

Slides have been added of Nos. 137, 299, 302, 315, 317, 318.





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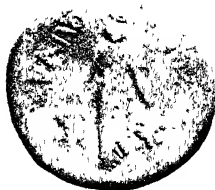
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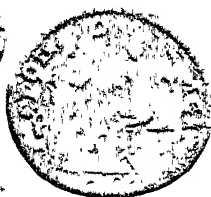
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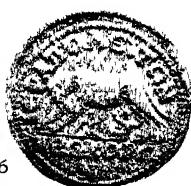
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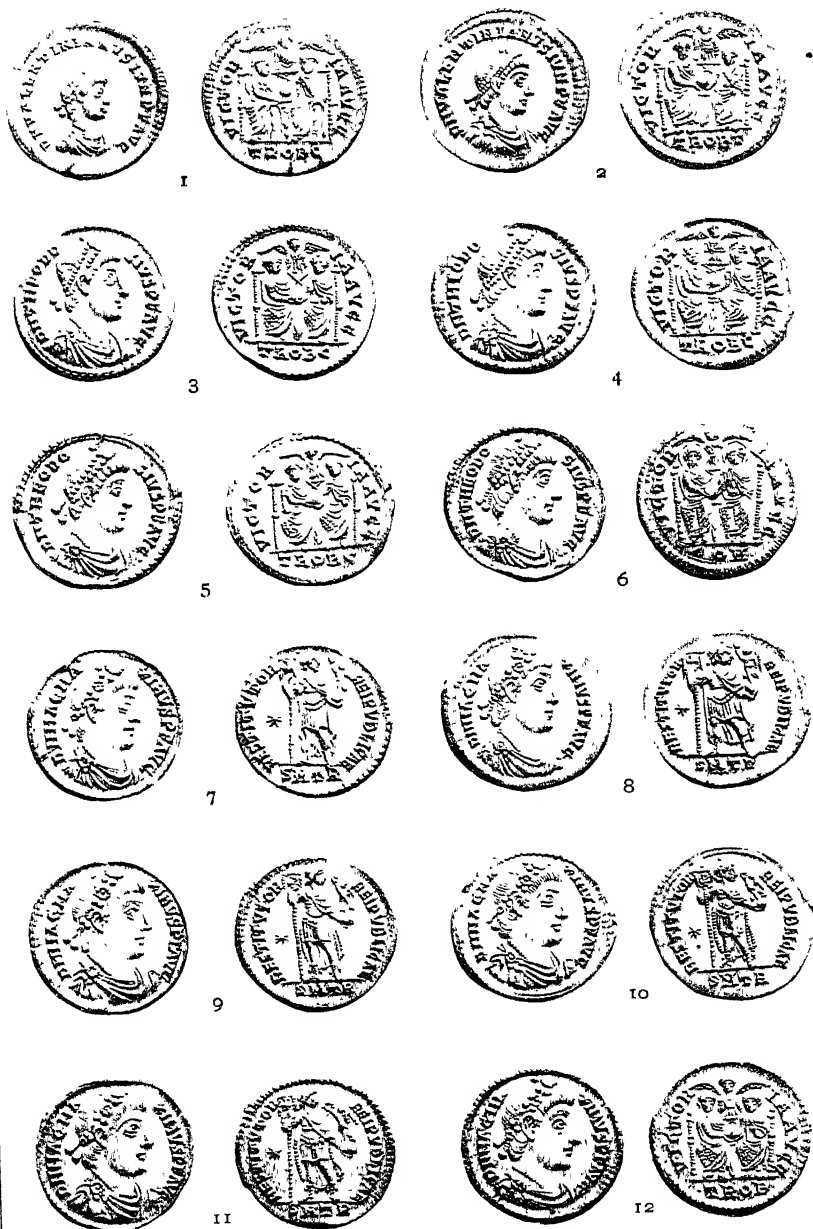


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FIRST CORBRIDGE FIND
(VALENTINIAN—MAGNIUS MAXIMUS)



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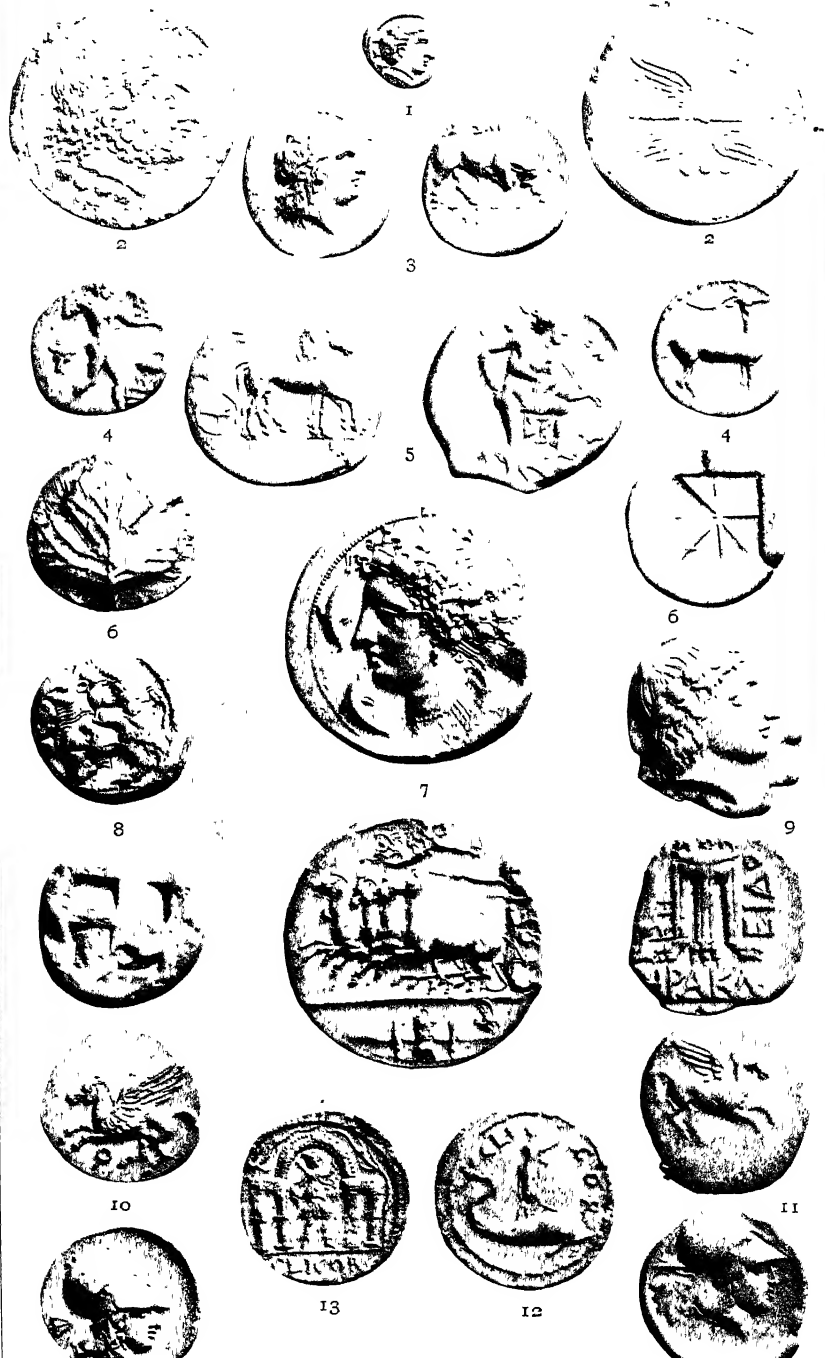


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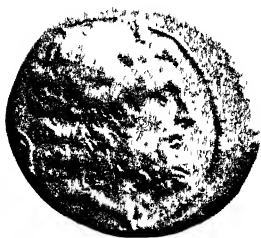
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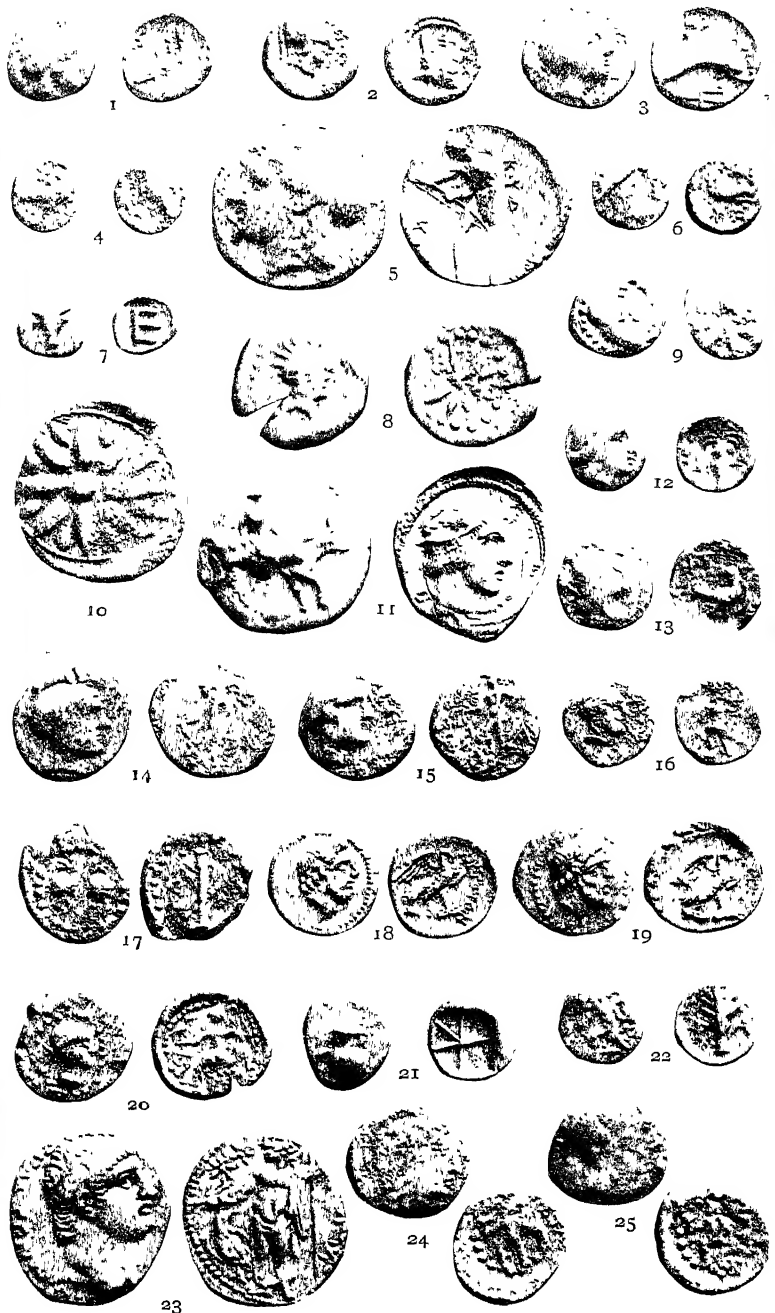
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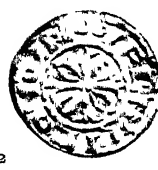
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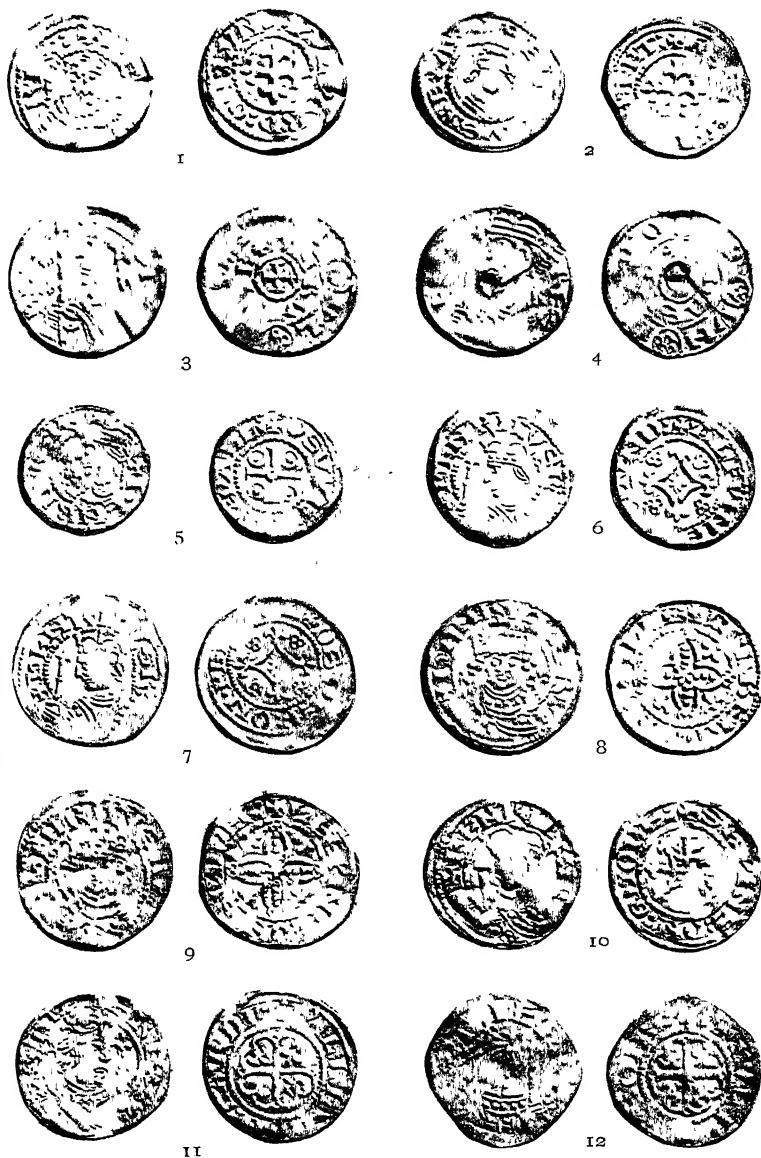


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WILLIAM I, TYPE V; HENRY I, TYPES I-X



HENRY I, TYPES X-XV; STEPHEN, TYPE I





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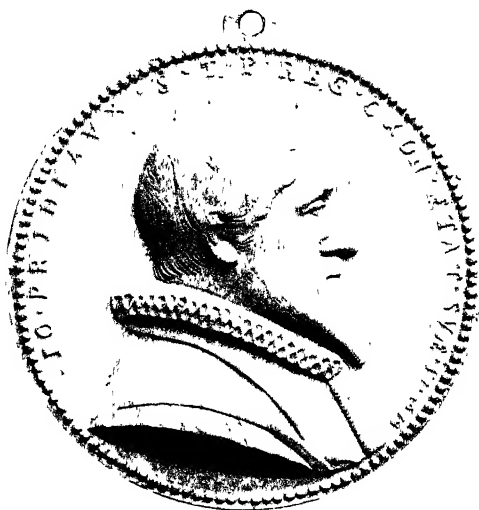


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PROCEEDINGS
OF THE
ROYAL NUMISMATIC SOCIETY.

PROCEEDINGS OF THE ROYAL NUMISMATIC SOCIETY.

SESSION 1912—1913.

OCTOBER 17, 1912.

SIR HENRY H. HOWORTH, K.C.I.E., F.R.S., F.S.A., President,
in the Chair.

The minutes of the ordinary meeting of May 18 were read and confirmed.

Mr. Charles J. P. Cave was proposed for election as a Fellow of the Society.

The following Presents were announced and laid upon the table, and thanks were ordered to be sent to their donors:—

1. Transactions of the Japan Society. Vol. ix.
2. Report of the United States National Museum, 1911.
3. Journal of Hellenic Studies. Vol. xxxii., Pt. 1.
4. Memoires de la Société royale des Antiquaires du Nord, 1911–1912.
5. Bulletin of the Archaeological Institute of America. Vol. iii., No. 2.
6. Journal of the Royal Society of Antiquaries of Ireland. Vol. xlii., Pts. 1 and 2.
7. The Numismatist, June to September, 1912.
8. The Canadian Antiquarian and Numismatic Journal. Vol. vii., No. 4, and Vol. ix., No. 1.

9. Monatsblatt der Numismatischen Gesellschaft in Wien. Nos. 346-350.
10. Proceedings of the Royal Irish Academy. Vol. xxx., Nos. 3 to 11.
11. Revue Belge de Numismatique. 3^{me} and 4^{me} livraison, 1912.
12. Aarbogen for Nordisk Oldkyndighed og Historie, 1911.
13. Rivista Italiana di Numismatica. Fasc. 2 and 3, 1912.
14. Revue Numismatique. 2^{me} and 3^{me} trimestre, 1912.
15. Revue Suisse de Numismatique. Tome xviii., 1^{re} livraison.
16. La Restauration de l'Atelier Monétaire de Neuchatel en 1588. By W. Wavre and E. Demole. *From the Authors.*
17. Numismatische Zeitschrift. Heft 3, 1911.
18. Bulletin de l'Academie royale de Belgique. Nos. 4-7, 1912.
19. American Journal of Archaeology. Vol. xvi., Nos. 2 and 3.
20. Report of Madras Government Museum, 1911-1912.
21. Notices Extraites de la Chronique de la Revue Numismatique. 2^{me} trimestre, 1912. By A. Blanchet. *From the Author.*
22. L'Avènement de Postume à l'Empire. 21 and 22. By A. Blanchet. *From the Author.*
23. Reattribution of Certain Tetradrachms of Alexander the Great. By E. T. Newell. *From the Author.*
24. Journal Internationale d'Archéologie Numismatique, 1912.
25. American Journal of Numismatics. Vol. xlv., No. 2.
26. Biographical Dictionary of Medallists. By L. Forrer. Vol. v. *From Messrs. Spink & Son.*
27. Zeitschrift für Numismatik. Band xxix., Heft. 3 and 4.
28. Catalogue of Islamic Coins. By Ahmad Zira. *From Mr. H. A. Grueber.*

29. *La Monnaie royale depuis la Réforme* par Charles V. By A. Dieudonné. *From the Author.*

30. Forty-second Annual Report of the Deputy-Master of the Mint, 1911.

31. Annual of British School at Athens. No. xvii.

Mr. Bernard Roth exhibited a unique gold stater of the Andecavi found on the beach at Lymington over 25 years ago, resembling De la Tour, *Atlas de Monnaies Gauloises*, Pl. xxi., No. 6723, but with horse to l. instead of r.

Mr. T. Bliss exhibited the following English sovereigns:—

Third Coinage of Henry VII. *Obv.* Lys. King enthroned with sceptre. *Rev.* Dragon. Small shield on double rose. (Wt. 239 grains.)

Henry VIII: First Coinage. *Obv.* Crowned portcullis on both sides; King enthroned with portcullis at his feet. *Rev.* Shield on double rose. (Wt. 235 grains.) Third Coinage. Lys on both sides. *Obv.* King enthroned. *Rev.* Shield of arms with lion and dragon supporters; H R on tablet. (Rud., Pl. vi. No. 1.) (Wt. 198 grains.)

Edward VI.: Third Year. *Obv.* King seated in chair of state with sword and orb. *Rev.* Arms crowned with usual supporters; below E. R. on tablet. (Wt. 168 grains.) Second Coinage. *Obv.* King seated on throne. *Rev.* The same with arms crowned with usual supporters; below E. R. on tablet. (Rud., Pl. vii. No. 2.) (Wt. 169 grains.)

Mr. Percy H. Webb read a paper entitled "Helena N. F.," in which he discussed the coins attributed to Helena, Helena the younger, and Fausta, and concluded that the only Helena depicted on the coinage is St. Helena, mother of Constantine. (This paper was printed in Vol. XII. (1912), pp. 352-360.)

Mr. H. A. Ramsden read a paper on some remarkable square and round early Chinese coins. These were pieces of 5 *chu*, some bearing the mint, differing in type from anything previously known.

NOVEMBER 21, 1912.

SIR HENRY H. HOWORTH, K.C.I.E., F.R.S., F.S.A., President,
in the Chair.

The minutes of the ordinary meeting of October 17 were read and approved.

Mr. Charles J. P. Cave was elected a Fellow of the Society; Mr. A. van Buren and the Rev. W. L. Gantz were proposed for election.

The following Presents were announced and laid upon the table, and thanks ordered to be sent to their donors:—

1. The Secret of Kanishka. By J. Kennedy. *From the Royal Asiatic Society.*
2. Bulletin of the Archaeological Institute of America. Vol. iii., No. 3.
3. Numismatische Zeitschrift. Band v., Heft. 1.
4. Monatsblatt der Numismatischen Gesellschaft in Wien. No. 351.
5. American Journal of Numismatics. Vol. xlv., No. 3.
6. Notices Extraites de la Chronique de la Revue Numismatique. By A. Blanchet. 3^{me} trimestre, 1912. *From the Author.*
7. Les Billets de la Caisse Patriotique de la Châtre en 1792. By A. Blanchet. *From the Author.*
8. La Monetazione di Augusto. By L. Laffranchi. *From the Author.*
9. Contributi al Corpus della Falsificazione, 1911 and 1912. Archeologia e Numismatica. By L. Laffranchi. *From the Author.*
10. Publications da la Section historique de l'Institute de Luxembourg. Vol. lii., fasc. 2, and Vol. lviii.
11. Bulletins de la Société des Antiquaires de l'Ouest. 2^{me}, 3^{me}, and 4^{me} trimestre, 1911.
12. Forvänner Meddelanden.

13. Guide to the National History Museum, Stockholm. By O. Montehin. *From the Royal Academy, Stockholm.*

Mr. F. A. Walters exhibited a medallion of Commodus (Cohen, No. 474 ; Gneecchi, Pl. lxxxiii, 3) found at York.

Miss Helen Farquhar showed an unpublished medal of Charles II by Jean Varin and a slate matrix by S. Henning for a medal of Mary, Queen of Scots, on which she read a short paper. (This paper is published in this volume, pp. 246-254.)

Mr. J. H. Pinches exhibited a portrait plaque of the late General Booth.

Mr. W. H. Valentine exhibited a Persian coin purporting to be struck by the "King of Jinns" on which Dr. Codrington read a paper. (This paper is published in this volume, pp. 123-129.)

Mr. H. A. Grueber read a paper on the "Douglas (Isle of Man) Find of Anglo-Saxon Coins." These coins were found some years ago with silver ornaments in Douglas. They covered the period c. 925-975 A.D., and were with one exception—a penny of Anlaf—coins of Wessex. Mr. Grueber connected the deposit with the visit to Chester of Edgar in 973.

DECEMBER 19, 1912.

SIR HENRY H. HOWORTH, K.C.I.E., F.R.S., F.S.A., President,
in the Chair.

The minutes of the ordinary meeting of November 21 were read and approved.

The Rev. W. L. Gantz and Mr. A. van Buren were elected Fellows of the Society ; Mr. W. Bertram Thorpe was proposed for election.

The following Presents to the Society were announced and

laid upon the table, and thanks ordered to be sent to their donors :—

1. Manuel de Numismatique Française. Vol. i., by A. Blanchet. *From the Author.*

2. Journal of Hellenic Studies. Vol. xxxii., Pt. 2.

3. Monatsblatt der Numismatischen Gesellschaft in Wien. No. 352.

4. Journal of the Royal Society of Antiquaries of Ireland. xlii. 3, and Index to xli.

5. Canadian Antiquarian and Numismatic Journal. ix., Pt. 2.

6. Archaeologia Aeliana. N.S., Vol. viii.

The Rev. Edgar Rogers exhibited a series of rare or unpublished copper Seleucid coins on which he read notes.

Mr. R. B. Whitehead, I.C.S., read a paper entitled "The Early History of India illustrated by Coins." After giving a sketch of the history of the decipherment of the Kharoṣṭhi legends on Graeco-Indian coins, the author dealt with the rise of the Greek kingdom in Bactria and its transference to India : he showed how the coins illustrate its gradual decline in India, and traced from the coins the history of the various Scythian invaders who ultimately overthrew and succeeded the Greek kings.

JANUARY 16, 1913.

SIR HENRY H. HOWORTH, K.C.I.E., F.R.S., F.S.A., President,
in the Chair.

The minutes of the ordinary meeting of December 19, 1912, were read and approved.

Mr. W. Bertram Thorpe was elected a Fellow of the Society.

The following Presents to the Society were announced, and thanks ordered to be sent to their donors :—

1. Numismatic Circular, 1912. *From Messrs. Spink & Son.*

2. Monatsblatt der Numismatischen Gesellschaft in Wien. No. 353.

3. Bulletin of the Archaeological Institute of America. Vol. iii., No. 4.
4. Report of Horniman Museum, 1911.
5. Revue Suisse de Numismatique. Tome xviii., 2^{me} livraison.
6. Revue Belge de Numismatique. 1^{ère} livraison, 1913.
7. Academie Royale de Belgique; Bulletin. Nos. 8 to 11. 1912.
8. American Journal of Archaeology. Vol. xvi., No. 4.
9. Monnaies de Batenbourg. By the Vicomte B. de Jonghe. *From the Author.*

Mr. Bernard Roth exhibited a specimen of each type of Stephen's coinage in the order suggested in Mr. Brooke's paper, and a halfpenny, a mule between types I and II; Mr. Roth also showed a remarkable square Hiberno-Danish penny with legible inscriptions on both sides.

Mr. Henry Garside exhibited a set of recent coins of Canada, 5, 10, 25, 50 cents silver, and a bronze cent of 1911; sovereign (mint-mark C), 5, 10 dollar gold of 1912, and the 1912 issues of the anna and its subdivisions for British India.

Mr. G. C. Brooke read a paper on "Epigraphical Data as a clue to the order of the Coin Types in the Norman Series," in which he gave the results of a series of detailed measurements of the punches used in the dies for the coins of the Norman kings, and proposed a rearrangement of the types as a result. A discussion followed in which Messrs. Lawrence, Earle Fox, Shirley-Fox, Carlyon-Britton, Hocking, and the President took part.

FEBRUARY 20, 1913.

SIR HENRY H. HOWORTH, K.C.I.E., F.R.S., F.S.A., President,
in the Chair.

The minutes of the ordinary meeting of January 16 were read and approved.

Mr. J. S. Shirley-Fox was proposed for election as a Fellow of the Society.

The following Presents to the Society were announced and laid upon the table, and thanks ordered to be sent to their donors :—

1. British Numismatic Journal. Vol. viii. *Presented by Miss Farquhar.*

2. Proceedings of the Society of Antiquaries of London. Vol. xxiv. *From the Society.*

3. Aarsberetning, 1911. *From the Foreningen til Norske Fortidsmindesmerkers Bevaring.*

4. The Canadian Antiquarian and Numismatic Journal. Vol. ix., Nos. 3 and 4.

5. Portraiture of our Stuart Monarchs. By Miss H. Farquhar. Pt. iv. *From the Author.*

6. Monatsblatt der Numismatischen Gesellschaft in Wien. No. 354.

7. American Journal of Numismatics. Vol. xlv., No. 4.

8. Finlands Kyrskor and Tidskrift. By R. K. Meinander and J. Rinne. xxvi. *From the Finska Forminnesforeningens.*

9. Rivista Italiana di Numismatica. Fasc. iv., 1912.

10. Proceedings of the Royal Irish Academy. Nos. 12, 13, 14, and 15.

11. Katalog der Historischen Abteilung der Luftschiffahrts-Ausstellung. Frankfurt-am-Main.

12. Revue Numismatique, 1912. 4^{me} trimestre.

Mr. W. J. Hocking read a paper entitled "Some Notes on Norman Epigraphy," in which he discussed the method of minting Norman coins from the technical point of view. As a result of his examination of the coins, Mr. Hocking was convinced that the dies were engraved and not struck by punches. A discussion followed in which Mr. Earle Fox, Mr. Webb, and the President joined.

MARCH 12, 1913.

PERCY H. WEBB, ESQ., Treasurer, in the Chair.

The minutes of the meeting of February 20 were read and approved.

Mr. J. S. Shirley-Fox was elected a Fellow of the Society.

The following Presents to the Society were announced and laid upon the table, and thanks ordered to be sent to their donors :—

1. Numismatique Constantinienne. By J. Maurice. Tome 3. *From the Author.*

2. Journal of the Royal Society of Antiquaries of Ireland. Vol. xlii., Pt. 4.

3. Monatsblatt der Numismatischen Gesellschaft in Wien. No. 355.

4. Notices Extraites de la Chronique de la Revue Numismatique, 1912. 4^{me} trimestre.

5. Proceedings of the Society of Antiquaries of Scotland. Vol. xlvi.

6. Bulletin de la Société des Antiquaires de l'Ouest. Pts. 2, 3, 4 of 1910 ; Pt. 1 of 1911 ; Pts. 1 and 2 of 1912.

7. Guide to the Horniman Museum. *From the London County Council.*

8. Proceedings of the Cambridge Antiquarian Society. Nos. lxii. and lxiii.

The Rev. Edgar Rogers exhibited a fine tetradrachm of Antiochus VII and Cleopatra Thea of Syria.

Mr. Webb showed four coins of Helena N. F., and read a note in reply to criticism by M. Jules Maurice on his previous paper.

Miss Helen Farquhar exhibited a fine series of coins illustrating Mr. Symonds's paper.

Mr. Henry Symonds read a paper on "The Mint Engravers of the Tudor and Stuart Periods," in which he gave a complete list of the gravers then in office with their

dates. Two previously unknown incidents in Briot's life were described, and light thrown on the gravers who worked at the Tower mint during the Civil War. (This paper is printed in this volume of the *Chronicle*.)

APRIL 17, 1913.

SIR HENRY H. HOWORTH, K.C.I.E., F.R.S., F.S.A., President,
in the Chair.

The minutes of the ordinary meeting of March 12 were read and approved.

The following Presents to the Society were announced and laid upon the table, and thanks ordered to be sent to the donors :—

1. Rivista Italiana di Numismatica, 1913. Pt. i.
2. Revue Belge de Numismatique, 1913. Pt. ii.
3. Revue Suisse de Numismatique. xviii., 3.
4. Proceedings of the Royal Irish Academy, 1913. Nos. 16 to 21.
5. Monatsblatt der Numismatischen Gesellschaft in Wien. No. 358.
6. Annuaire de l'Academie Royale de Belge, 1913. No. 79.
7. Numismatische Zeitschrift. 1913.
8. G. T. Turner: A Calendar of Feet of Fines relating to the County of Huntingdon. Cambridge, 1913. *From the Author*.

9. Annual Report of the Smithsonian Institute, 1912.

10. Cagliati: Supplemento al Monete delle due Sicilie.

Mr. Bliss exhibited a half sovereign, a George noble, an angel, half- and quarter- angel of Henry VIII, and, on behalf of Mr. Baldwin, specimens of the new and old nickel coinage of Nigeria.

Mr. Webb showed a specimen of the new 5 cent piece of the United States presented to the Society by Mr. A. R. Frey.

Mr. L. A. Lawrence read a paper by Mr. Brooke and himself on "A Find of Long-Cross Pennies at Steppingley." Mr. Lawrence briefly outlined the classification of the series, and illustrated by drawings the various types of crown, &c., which marked the different types, and showed the bearing of this find on his researches.

MAY 18, 1913.

PERCY H. WEBB, ESQ., Treasurer, in the Chair.

The minutes of the ordinary meeting of April 17 were read and approved.

The following Presents to the Society were announced and laid upon the table, and thanks were ordered to be sent to the donors :—

1. Canadian Antiquarian and Numismatic Journal. Vol. x., No. 1.
2. American Journal of Archaeology. Vol. xvii., No. 1.
3. Journal of the Royal Society of Antiquaries of Ireland. Vol. xliii., Pt. 1.
4. Monatsblatt der Numismatischen Gesellschaft in Wien. No. 357.
5. Proceedings of the Numismatic and Antiquarian Society of Philadelphia. Vol. 25.
6. Coin Types of Imperial Rome. By F. Gnechi. Translated by Emily A. Hands. *From Messrs. Spink & Son.*
7. Italo-Greek Coins of Southern Italy. By the Rev. A. W. Hands. *From Messrs. Spink & Son.*
8. Suomen Museo. Finsk Museum. xix., 1912.
9. Numismatische Zeitschrift. Heft 1, 1913.

Messrs. C. P. Hyman and G. C. Brooke were appointed to audit the Society's accounts for 1912–1913.

Mr. Webb read a further note on the Helena N. F. question, in which he discussed several points raised in a letter from M. Jules Maurice.

Mr. J. Allan read a paper on "The Circulation of Arab Silver Coins in Mediaeval Europe," in which he traced the route and gave an account of the trade by which silver coins of various Arab dynasties of the seventh to tenth centuries, notably of Persia and Transoxania, were brought through Russia to the Baltic coasts, and thence dispersed over Northern Europe by the Norsemen. Dr. Codrington and Mr. Webb also spoke.

JUNE 19, 1913.

ANNUAL GENERAL MEETING.

SIR HENRY H. HOWORTH, K.C.I.E., F.R.S., F.S.A., President,
in the Chair.

The Minutes of the Annual General Meeting of June 20, 1912, were read and approved.

Messrs. L. G. P. Messenger and Frederick J. Brittan were appointed scrutineers of the ballot for the ensuing year.

On the motion of the President it was unanimously agreed to change the hour of meeting of the Society next session to 6 p.m.

The following Report of the Council was then read to the meeting :—

The Council have again the honour to lay before you their Annual Report as to the state of the Royal Numismatic Society.

It is with deep regret that they have to announce the death of one Honorary Fellow :—

Commandant Robert Knight Mowat,

and of the following seven Fellows—

Rt. Hon. Lord Avebury, P.C., F.R.S., D.C.L.

B. C. Chetty, Esq.

Capt. R. J. H. Douglas.

Sir Robert Hamilton Lang, K.C.M.G.

John Robinson McClean, M.A.

Rev. W. G. Searle, M.A.

Baron G. de Worms, F.R.G.S., F.S.A., D.L.

They have also to announce the resignation of the following eight Fellows :—

George Clulow, Esq.

William S. Churchill, Esq.

Frank Ll. Griffith, Esq., M.A., F.S.A.

Richard Hewitt, Esq.

Charles F. Keary, Esq., M.A., F.S.A.

E. A. Mitchell-Innes, Esq., K.C.

John E. Pritchard, Esq., F.S.A.

Walter F. Vinter, Esq.

On the other hand, they have much pleasure in announcing the Election of the following six Fellows :—

A. W. van Buren, Esq.

K. Anantisama Rao, Esq.

Charles J. P. Cave, Esq.

J. S. Shirley-Fox, Esq.

Rev. W. L. Gantz.

W. Bertram Thorpe, Esq.

The number of Fellows is, therefore :—

	Ordinary.	Honorary.	Total.
June, 1912	292	21	313
Since elected	6	—	6
	298	21	319
Deceased	7	1	8
Resigned	8	—	8
	283	20	303

The Council have to announce that they have awarded the Medal of the Society to Dr. George Macdonald, Honorary Curator of the Hunterian Coin-Cabinet, and of the Cabinet of the Society of Antiquaries of Scotland.

The Hon. Treasurer's Report, which follows, was then laid before the meeting :—

STATEMENT OF RECEIPTS AND DISBURSE-

FROM JUNE, 1912,

Dr.

THE ROYAL NUMISMATIC SOCIETY IN ACCOUNT

	£	s.	d.	£	s.	d.
<i>To Cost of Chronicle—</i>						
Printing	166	5	10			
Plates, &c, ...	75	9	9			
				241	15	7
<i>To Books, &c.</i>				2	18	0
<i>To Lantern Expenses</i>				4	10	9
<i>To Rent and Refreshments</i>				41	9	9
<i>To Sundry Payments</i>				9	2	6
<i>Balance in hand—</i>						
General Account	238	18	3			
Research Account	14	3	10			
				253	2	1
				£552	18	8

Tr.

$$b$$

The Reports of the Council and of the Treasurer were adopted on the motion of the President; Mr. Coleman P. Hyman suggested that the *Chronicle* might be issued in bound form, and a discussion took place on the proposal.

The President then presented the Society's medal to Dr. George Macdonald, and addressed him as follows:—

DR. MACDONALD,—

It is a great pleasure to me to be in this chair on an occasion so grateful to myself, when the Royal Numismatic Society is conferring on one of its most distinguished members the only proof it can offer of its appreciation of his work. I am sure you will feel, Sir, if you look over the list of those who have already received this honour, that you find yourself to-day in a very goodly company comprising nearly all those who for several years past have most successfully cultivated our Science. I am just as sure that all your friends here feel that you are a most worthy addition to that group of decorated Coin-Men, and that none of them has more completely earned this prize. Your career at the University was a brilliant one. You carried with you to Balliol the reputation you had made at Edinburgh where you received the Ferguson Scholarship in 1883, and you left Oxford with two "firsts." You began your literary career soon after by translating a portion of Erdmann's notable work on the history of Philosophy, a good beginning for a student whatever line of study he may afterwards pursue. You found a congenial occupation at Glasgow, where you finally became the first lecturer on Classical Archaeology. It is not strange that living at Glasgow with such tastes and such preparation you should have deemed it a worthy work to catalogue the first and noblest collection of Greek coins ever made in these islands by a single individual, a man whose distinction and reputation as a most skilled and successful doctor have made his name a great beacon in the annals of Medicine in every

latitude. This magnificent series of Greek coins had been very partially described a century ago by a fine scholar, Combe. The collection, which was very rich in unique and rare coins, could not, however, in Combe's time be adequately treated, for the science of Greek Numismatics was still in its cradle. It was a scandal that so noble a collection as that which had been presented by Hunter to Glasgow should have remained for so long undescribed and virtually inaccessible, and it was indeed a good fortune that the work should have passed into the hands of one so well prepared for it. Although professedly a catalogue your three portly volumes really form an indispensable classic on the subject of Greek coins of all parts of the Greek world, full of new suggestions and sound learning, and carried out according to the most modern lights.

In 1905 you delivered the Rhind Lectures on the "Origin and Development of Coin-Types," a notable performance, and you were one of the most helpful of those who assisted our "father Anchises" Head in preparing the second edition of his great work—the *Historia Numorum*. You also wrote a memoir on the technique of the coiner's art dealing with fixed and loose dies published in *Corolla Numismatica*. You have enriched our own *Numismatic Chronicle* with twelve excellent memoirs, in which, in addition to the Greek series, you have discussed the Roman medallions and contorniates in the Hunterian Collection, and three hoards of Edwardian pennies found in Scotland.

A favourite subject of yours, which is especially illuminated in the Hunterian Catalogue, namely, the coins of the Seleucid series, has been further explored in another aspect in a notable paper on Seleucid portraits in the *Journal of Hellenic Studies*, while the same dynasty has furnished you with materials for a second memoir in the *Zeitschrift für Numismatik*.

This is a rich harvest for one explorer to have gathered, and especially when we measure it not merely by its extent

but by the general level of excellence attained in it. We notice with delight that you retain your youth and your vigorous health, and we may express the hope that your excellent plough will for many years to come traverse some of those arid and difficult fields which still remain unexplored, that we shall continue to profit by your learning and by your friendly urbanity towards us all. We hope that you will carry to Scotland with you and retain in your memory the kind thoughts of us all for yourself which accompany this gift, and will no doubt do a good deal to make it welcome to you.

On receiving the Medal, Dr. Macdonald replied—

MR. PRESIDENT AND FELLOW-MEMBERS OF THE ROYAL
NUMISMATIC SOCIETY,—

I can assure you that I appreciate, and appreciate most deeply, the distinction which the Council have conferred on me by adding my name to what it may now perhaps seem a trifle immodest upon my part to speak of as the Society's roll of honour. Under any circumstances the difficulty of framing a suitable acknowledgment would have been great. It has not been made any less by the overwhelming kindness of the remarks which have accompanied the presentation of the Medal. Your too friendly words, Sir Henry, have filled me with something not far removed from confusion. I can only thank you for them most heartily, and in the same spirit of humility as that in which I thank the Council for their generous recognition of such services as it has been my good fortune to be able to render to the science which is the common interest of us all.

There is, however, one point which I ought not to miss this opportunity of emphasizing, one obligation which it is a simple duty to put on record. Although residence at a distance from London has effectually prevented my attending the

ordinary meetings, yet the more I reflect upon it, the more conscious do I become that my work, *qualecumque est*, would have been impossible without the existence of this Society as a focus, if I may so put it, of help and information. It is just twenty years since the late Professor Young suggested that I should undertake to prepare a revised Catalogue of Dr. Hunter's Greek coins. At that time I had absolutely no qualifications for the task except a keen interest in the subject, and a strong conviction that here was something which needed doing, something which it was worth while trying to do well. I should very soon have found myself sadly adrift, had it not been that by joining this Society I was at the outset brought into touch with those who were able to give me the guidance and advice of which I was so much in need, and particularly with the Mentor who has already been alluded to by you—Dr. Head, whom so many of us are proud to look up to with the respect and affection that a really great teacher can always command from his pupils. I well remember the encouragement I derived from the cordial way in which he wrote to welcome my first contribution to our *Chronicle*. Another incident that stands out vividly in my recollection is the visit I received not long afterwards from our late President, Sir John Evans, who put himself to no small personal trouble to seek me out in Glasgow, in order that he might tell me by word of mouth of his warm interest in what I was attempting to accomplish.

But I am not here to indulge in personal reminiscences. I am here to express grateful thanks for this handsome and honourable reminder of the favourable judgment you have been pleased to pass on such fruit as the study I have devoted to numismatics has borne. You have referred, Sir Henry, to the distinguished company in which I shall henceforth find myself. In thinking of the long list of those who have preceded me as recipients of the Medal, I cannot but realize that my own merits fall far short of the merits of most

of those who have gone before. In one thing only can I claim to be second to none—in warm appreciation of the gift now so generously and so kindly bestowed.

The President then delivered the following address:—

MISS FARQUHAR AND GENTLEMEN,—

The fashion of giving an annual address by the President of a learned Society is not so frequent as it was once, the fact being that it becomes increasingly difficult to make it other than an otiose record of work already done or a scanty syllabus of prospective work. You will pardon me therefore if I turn for inspiration elsewhere than to furnishing you with a bald, barren, and incomplete list of the papers which you and our friends elsewhere have written during the last two years with appreciations which, inasmuch as they would cover a larger field than any individual can compass, must be impertinent when they are not useless and ridiculous. Neither shall I read to you a list of obituaries of those who have gone away. I always think it more seemly myself that these notices should be taken as read and be included in our printed report, for the personal elements in them, except in certain special cases perhaps, can only interest those who have known the men. This will limit me greatly in my choice of subject, and I have determined to confine my remarks, which shall be short, to a subject which has occupied my thought a good deal lately, and which I deem a more important matter. It is at least a matter which I hope may prove more fruitful than conventional recapitulation of the triumphs secured by our study which has furnished materials for many similar addresses. For many years I have nursed the hope that we might here organize some plan to do for the English coinage what is being now done in Germany for the coinage of Ancient Greece, what has been already done in a considerable measure for the coinage of Ancient Rome, and has also been done, or is

being done, for the great states of the Continent, and notably Italy, namely, to have an up-to-date monograph on English Numismatics, done as completely as it is possible to do it, and presenting the subject in its latest and most scientific aspects. For this purpose the times are singularly propitious. Never before have so many competent critics of the English series converged a critical examination upon it, and published so many and such excellent papers on different parts of it, and never have there been so many collectors especially devoted to it. A measure of this latter fact is to be found in the prices now paid at sales for English coins which make it almost impossible for Museums to compete with private collectors. A good example of what I mean is to be found in the recent sale of Mr. Walters' coins.

It is not only in the technical knowledge and the minute analysis of the coins themselves that so much progress has been made. This has been phenomenal, and has gladdened the hearts of many collectors with whom the systematic arrangement of coins in many cases constitutes the whole subject-matter of Numismatics, and the discrimination of minute details makes up the measure of numismatic proficiency. I am not minimizing the importance and the necessity of this kind of knowledge without which collections of coins would merely be chaotic masses of individual objects without the possibility of methodical study. What I need not emphasize here, for it is a commonplace of our discussions, is that the fundamental object of the study of coins is not merely their systematic arrangement. Coins are in essence historical monuments, and Numismatics is really a branch of history, a most important branch of history, in which the documents are in so many cases dated, and unmistakably contemporary. In many cases they form the chief scaffolding upon which scientific history has to be built. I can speak with some slight experience on this matter, for it has been my fortune to devote a great deal of my life to try and

elucidate the broken and disintegrated story of the Asiatic Nomads, and on considerable chapters of that investigation by far the most important materials, nay, the only really useful materials, have been coins. Many royal names, nay, dynasties of names, can only at present be recovered from coins. And this is not all. These same coins in many cases preserve the most precious documentary evidence of the art, the religious faith and ritual, the language, and the economic condition of the peoples who have used them, and the time has long ago gone by when it was thought that a numismatic memoir was to be tolerated, which was limited to a description of the metals from which the coins were made, their size and shape, the mere varieties of types and of mint-marks, and did not explore the wide horizon of historical and other lessons which are so abundantly illustrated by coins, and which to some of us form the main goals of the science which we pursue.

A very special reason for pressing for the publication of a monograph on English coins at this time is the fact that we not only have a large number of very gifted and very competent students of the series as coins, but that we also have a much more trained and efficient body of scholars to deal with the documentary evidence in regard to our native coinage than we ever had before. Most of you know that England is not only pre-eminent but almost incomparably so in the vast and virtually complete series of its public documents, legal and otherwise, dating back to the very beginning of our administrative system. No community in the world, save one perhaps, can vie with us in this respect. That one is the Church of Rome, the Chancery of which is extraordinarily rich, but this also falls far behind our Record Office and other depositories in the earlier period. This is especially important to remember when we are dealing with coins as historical documents. Very few people have any idea of the wealth of documents illustrating the history of our

coinage contained in our public records, which have never been printed or even examined. It was in fact a task beyond the capacity of any one man to compass. We cannot be under too great obligations to Snelling and Ruding and their successors, who have gleaned a fine harvest in this field of exploration, but they have necessarily been gleaners. What is needed is a specially selected committee to deal with the documentary evidence. What may be expected here can be foretold from the prefaces to some of my friend Mr. Round's volumes of the Pipe Roll in which the history of the coinage has been made such a feature. It is not only the documentary resources of the Rolls Office and other similar depositories that need a systematic search, but the records of the Mint itself, and still more the harvest to be gathered from Royal proclamations, which were virtually inaccessible until a splendid catalogue and syllabus of those still existing was made at the expense and instance of another friend of mine, the late Lord Crawford. I have been quite astonished at the number of virtually unpublished and unknown documents contained in that fine work.

These are some of the reasons which have led me for many years to hope to see at least a beginning made of this most necessary and important work which I am pressing upon you, and I have felt that if I could induce you to sympathize and help in such a work I might, perhaps, have partially justified my having been placed in this chair by your favour when so many others with greater gifts than mine were available. Having these views I ventured a few weeks ago to bring the matter before a large meeting of the Society, and was greatly gratified by the reception of the proposal. It was unanimously approved and apparently very cordially, and by none more so than by those present upon whom the chief burden of the day would fall. I accordingly ventured to ask some members of our Committee, who were also on the Committee of the British Numismatic Society, if they would bring the

matter before it, and I also spoke to its president, Mr. Carlyon-Britton, and have received a very cordial letter from the secretary of that Society, my friend Mr. Andrew, which conveyed to me the adhesion of his friends to our scheme. The work in prospect is a long and laborious one. It will need a great effort. We may perhaps consider it now fairly started with the approval of all those most directly interested in it, and the next step is to carry out what has been sanctioned in principle. In doing this I venture to suggest that we should have a joint meeting of the Councils of the two Societies, who should proceed to elect a Committee representing those most competent and willing to carry out the scheme. This should discuss its details from every side, and formulate a plan of operations to be afterwards approved by both Societies.

On the motion of the Rev. R. Scott Mylne, a vote of thanks was accorded the President for his address.

The President then announced the result of the election of officers for the session 1913-1914 as follows:—

President.

SIR HENRY H. HOWORTH, K.C.I.E., F.R.S., F.S.A.

Vice-Presidents.

H. B. EARLE-FOX, ESQ.

HENRY SYMONDS, ESQ., F.S.A.

Treasurer.

PERCY H. WEBB, ESQ.

Secretaries.

JOHN ALLAN, ESQ., M.A., M.R.A.S.

FREDERICK A. WALTERS, ESQ., F.S.A.

Foreign Secretary.

J. GRAFTON MILNE, Esq., M.A.

Librarian.

OLIVER CODRINGTON, Esq., M.D., F.S.A., M.R.A.S.

Members of the Council.

G. C. BROOKE, Esq., B.A.

SIR ARTHUR J. EVANS, M.A., D.LITT., LL.D., PH.D.,
F.R.S., F.S.A.

MISS HELEN FARQUHAR.

HERBERT A. GRUEBER, Esq., F.S.A.

GEORGE FRANCIS HILL, Esq., M.A.

BARCLAY VINCENT HEAD, Esq., D.C.L., D.LITT., PH.D.

L. A. LAWRENCE, Esq., F.S.A.

F. W. VOYSEY PETERSON, Esq., B.C.S. (retd.)

BERNARD ROTH, Esq., F.S.A.

EDWARD SHEPHERD, Esq.

LIST OF FELLOWS

OF THE

ROYAL

NUMISMATIC SOCIETY

1913

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- 1910 WILLIAMS, W. I., Esq., 22, High Durham Street, Bishop Auckland, Durham.
- 1881 WILLIAMSON, GEO. C., Esq., F.R.S.L., Burgh House, Well Walk, Hampstead, N.W.
- 1906 WILLIAMSON, CAPT. W. H. (address not known).
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- 1906 WOOD, HOWLAND, Esq., Curator of the American Numismatic Society, 156th Street, W. of Broadway, New York, U.S.A.
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 1898 DRESSEL, DR. H., Münz-Kabinet, Kaiser Friedrich Museum, Berlin.
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 1898 GNECCHI, COMM. FRANCESCO, Via Filodrammatici 10, Milan.
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 1891 SVORONOS, M. J. N., Conservateur du Cabinet des Médailles, Athens.
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